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Charlotte Medical Journal.

A SOUTHERN JOURNAL OF MEDICINE AND SURGERY.

VOLUME 65.
NUMBER 1

Charlotte, N. C., January, 1912.

$1.50
PER ANNUM.

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Nutrient Wine of Beef Peptone

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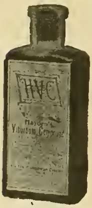

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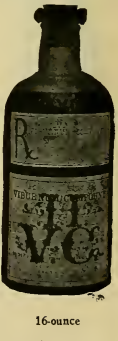

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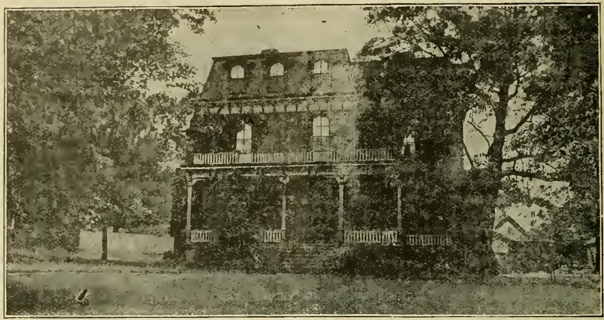

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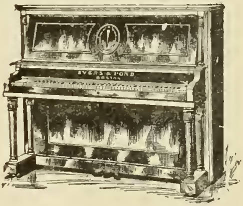

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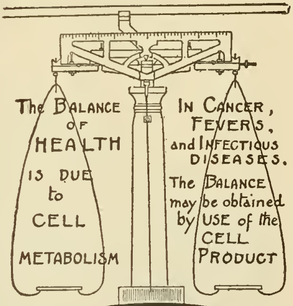

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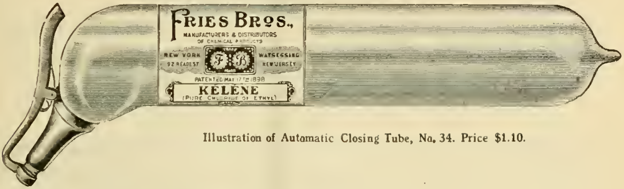

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The Charlotte Medical Journal

Vol. LXV CHARLOTTE, N. C., JANUARY, 1912. No.1

Surgical Treatment of Hernia.*

By R. L. Gibbon, M.D., Charlotte, N. C.

In a brief and unpretentious discussion of some of the questions which arise in connection with the surgical treatment of hernias, it would be superfluous to enter into any extended review of a subject which has so extensive a literature, and the details of which are so generally known and accepted by the profession at large.

In so far as I am capable of forming an opinion, the radical operation for hernia, the so-called Bassini operation or its modifications, is as perfect in technique as we are likely to get. A permanent cure of 97% of cases, as claimed by some, would surely seem to sustain this assertion, even if we allow that these statistics represent the work of the very best operators, in a certain select class of cases. To the average surgeon, the general practitioner, and still more to him who attempts an occasional operation of this sort, the question of the details, possible dangers and complications, the selection of cases, etc., is still a matter of interest. The prevalence of hernia, varying with the time of life, but represented, according to some, by over 2% of the human race, is so great that Dr. Willis, of Richmond, Va., has said that if all the patients made up their minds to be operated upon, it would take the surgeons of the world ten years to do the work. It is possibly some consideration of this sort that renders the field of surgery so popular with the young graduate, and the man, doing general work, but possessed of a surgical bee in his bonet. Yet the mournful fact must be faced that thousands of these potential patients do not apply, and many more are not fit subjects.

The mortality of this operation, in suitable cases, and competent hands, is very small, yet statistics should not blind us to the fact that these results are absolutely dependent upon a number of factors, and that certain dangers of a most disastrous kind lie in wait for the unwary, the inexperienced, and the careless.

Let us consider but a few of the more obvious of these perils to patient and operator. Infection is practically always sure to bring about a failure to permanently cure the trouble, and may prove dangerous to the life of the patient; injury to adjacent parts, such as the bladder, have occurred, sometimes with fatal results. I have known of two such instances, one of which died, the injury to bladder not having been discovered at the time, and peritonitis developing later. In only one case have I, personally, seen the bladder presenting in the wound in such a manner as to make it liable to injury. Puncture, or laceration of either the femoral vein or artery have been reported. I saw a needle puncture of the artery occur during an operation on a femoral hernia, by a skillful and experienced surgeon. With great coolness he succeeded in catching the perforation with a pair of forceps, and put on a lateral ligature, which controlled the hemorrhage, and avoided the very dangerous expedient of ligating the vessel, with the probability of gangrene of the limb. In speaking afterwards of this case the operator expressed uneasiness for fear that all the coats of the artery had not been included in the ligature, in which event an aneurism might result. Fortunately nothing of the kind happened, although the wound was infected and the cure was not permanent. Accidents of this nature have emphasized the necessity of passing the needle from below upwards, and not from above downwards, in suturing Poupart's ligament. The deep epigastric has also been injured, resulting in a most troublesome hemorrhage, and oftentimes failure of the operation. Rough separation of the sac from the cord has been followed by damage to the vas, or thrombosis of the veins with subsequent gangrene of the testicle. Finally, in this connection, stress should be laid on perfect hemostasis as an essential element in securing a good result. A blood clot between the layers of the wound not only serves as a favorable nidus for infection, but leads to defective union, with subsequent recurrence.

The question of transplantation of the cord, considered by Bassini as an essential part of the operation devised by him, is still a matter of opinion. A surgeon of one of our large hospitals told me that he was transplanting the cord in half of his cases for the sake of comparison. In a general way, I think it can be said that in children a careful ligation of the sac and a proper closure of the wound, without transplanting the cord, is perfectly satisfactory in results. With a wide open ring, and a large hernia of long standing, the probability is that better results are obtained by doing a transplantation.

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*Read before District Medical Society at Gastonia, N. C.

As regards the selection of cases suitable for the radical operation, speaking more particularly of inguinal hernia, it is the general opinion that children above the age of seven or eight years, and young people as a whole offer the best results. In the aged, the feeble, and those with great muscular relaxation, elective surgical treatment is not usually advisable. In hernias of great size, the number of relapses are such as to discourage surgical interference, and in many of this type so long has the hernial sac held a considerable portion of the abdominal contents, that there actually does not seem room for its comfortable return to the cavity normally occupied. In such cases it has been aptly said that from long absence the contents of the hernia has forfeited the right of domicile, and so can only deserve to be treated as an intruder.

While it is undoubtedly true that a certain proportion of inguinal hernias in young children are cured by the persistent wearing of a truss, yet the mechanical treatment requires such care and watchfulness upon the part of the mother, while the results of operative treatment are so favorable that it does not seem good practice to continue the use of a truss after the first few years of life have passed without a cure being effected. Even where a cure is apparently brought about, the effect is often only temporary, just as some subjects with an open funicular process do not develop hernia until mature life, and what we have diagnosed as an acquired, at operation is found to present the characteristics of a congenital hernia.

When we are called upon to treat cases of strangulated hernia, one of the most perplexing matters which may come up for decision relates to the viability of the strangulated gut. Every one is familiar with the usual practice in these cases of relieving the stricture and applying warm saline solutions while waiting to see if the circulation will return in the damaged gut. No doubt most of you have seen an article in a recent number of the Jour. Surgery, Gynecology and Obstetrics, by Dr. Plummer, of Chicago, who advises that in these questionable cases the gut be introduced into the abdominal cavity for a few minutes, and then withdrawn to see if the color has been changed. The warmth, and relaxation of tension upon the mesentery being the chief factors in restoring the circulation. This plan seems to have received the approval of the members of the Chicago Surgical Society, before whom it was read, and Dr. Plummer was congratulated upon having made a valuable suggestion. There are only two objections to the plan: one is that if the gut should have small necrotic areas, an introduction into the general cavity would probably result in peritonits, and the other is the possible difficulty of finding that particular section of bowel again. This latter objection has been met by the suggestion of placing a large suture through the mesentery, and thus anchoring the bowel. How easy it is to loose the diseased gut when once allowed to slip into the cavity, is well illustrated by the following case:

Mrs. W—, aged 75 years; first seen November 6th, 1910. Vomiting, pain, and bowel obstruction since November 2nd. Vomitus in last few hours had decidedly fecal odor. On examination, found a femoral hernia, size of a pigeon egg, which was incarcerated and moderately tender. Local anæsthesia was used, on account of the advanced age and feeble state of the patient.

On opening the sac a small knuckle of gut, perfectly black, and very tense, was found protruding from the femoral canal. Apparently only a part of the circumference of the gut was caught in the constriction (the so-called Richter's hernia). In cutting the constriction with intent to draw down more of the intestine, and test its viability, to my intense chagrin the gut slipped back into the cavity and could not be recovered, without subjecting the patient to a much more serious operation than seemed justifiable. Choosing what turned out to be the lesser risk, the wound was closed without any further attempt to find the constricted knuckle, and very much to my relief the recovery was good, and there has so far been no recurrence.

The alternative of doing an anastomosis, or making a fecal fistula where the gut is judged to be past redemption, are both so objectionable, under the circumstances, that one is justified, where there is any hope at all, in taking a certain amount of risk, and returning the intestine. In two cases recently I have returned sections of intestine about the viability of which I had grave doubt. One was a man 80 years of age, where strangulation had existed for three or four days with vomiting and prostration. The operation was done under cocaine, and almost any procedure would have been preferable to a resection. In the other case the intestine was œdematous, very dark and did not change under the usual methods. It is in just such cases that the suggestion of Dr. Plummer will prove most valuable, and furnish a reliable means of settling a question heretofore largely dependent upon personal judgment. His method should prove particularly acceptable to the practitioner of remote country sections, who are called upon at times to do a life saving operation without adequate help, and under adverse circumstances. To be able to decide promptly and wisely as to what disposition should be made of a badly damaged intestine is a piece of knowledge that can be appreciated only by those who have sweated in the midst of uncertainty and indecision.

Some Overlooked Cases of Malaria.

By Dr. Baxter Haynes, Cliffside, N. C.

Dr. William Pepper, of Philadelphia, who is a very eminent clinical pathologist, said recently that, "Malaria in his opinion is the most disastrous scourge, considering both the past and the present, that has ever afflicted the human race." He also speaks of it as a "Great Tyrant." Surely it is a great ruler of our physical welfare wearing a crown that could be transferred if the medical profession and the laity would only become aroused to their duty.

Malaria, according to the definition of the word, means bad air, but the name evidently was given to an unknown pathological condition years and years before the true pathological condition was recognized. However, bad air and unsanitary surroundings are predisposing factors, furnishing rich soil, and road beds with an even grade on which the many vestibules of nocturnal, musical, and areal songsters travel, carrying their gizzards full of the greatest pest to men in the tropical and sub-tropical regions. Malaria is a disease indigenous to the tropical and sub-tropical countries. It is caused as we all know by a protozoan parasite known as plasmodium, of which we find at least three kinds of species, and according to some authorities more. The parasite is known to undergo a cycle of development within its human host which perpetuates the disease in us human individuals. While the several steps of the cycle are taking place regularly a second form of development of the parasite takes place which results in the production of forms that produce no symptoms in the human host but which are capable of infecting the intermediate host—the anopheles. After the parasite has passed the development in the body of the mosquito, forms result that can be inoculated into a human by the bite of the nocturnal songster and so the disease is transmitted—and in no other way is the disease spread.

These mosquitoes find for their habitat and breeding place water either stagnated or slowly running. So many now find for their lying-in apartments tin cans, since people are now using so many canned goods to eat, throwing the empty cans in the back yard. Water collects and stands, hence a fertile soil for the big white elephant. This, I believe, is a very common place for them to propogate.

We doctors haven't the least idea the number of cases of malaria we have in our individual practice. There are today many cases of malaria existing, going unrecognized because we so often wait for the chill to appear before we make a diagnosis. I have in mind now one case who had one chill six years ago and no other symptoms of malaria, and a few montds ago I made a microscopical examination of blood and found she had an old chronic case of malaria and evidently from the looks of the blood, the appearance of the patient, also the previous history of the case, she has been infected with the plasmodium ever since I saw her six or seven years ago. I was called a few months ago to see one of my best patients about twelve o'clock at night, who had had a hard chill, with two degrees of temperature, with pain and tenderness over region of the bladder, with some nausea, and headache and a rather frequent desire to urinate.

Previous History.—She had been for a month feeling weak, no appetite, losing some weight; in other words, going down hill for several weeks. I thought I had some cystic trouble with which to deal and prescribed for same, but since I was anxious to do all the blood work I could and show my interest in the case, I asked for a specimen of blood which she readily consented to and I found that she was very severely and extensively infected with malaria. I put her that day on the proper treatment and in a few weeks her blood showed no signs of the plasmodium, and later on she gave birth to a normal, healthy baby, and the one chill is all she ever had.

Last year I read a paper on malaria as a complication of the puerpura and reported a case whom I delivered in April, which was before mosquitoes made their appearance that spring, but who finally said she had lived in a malarial district a year before, and up to half hour after delivery showed no signs of the disease, but examination of the blood revealed the fact that it was completely chocked full of the malaria plasmodium and was no short while getting well. This case had an abundance of albumin in her urine about the third week of confinement, which lasted for a great number of weeks, and after she was able to leave home she drifted into another doctor's hands. She was then complaining of some renal trouble and after examination of her urine, finding albumin, the doctor informed the husband that she had Bright's Disease and was not likely she would live six months. The husband started at once for home and immediately consulted me about Bright's Disease and I informed him we very often found albumin in the urine in severe cases of malaria and consoled his disturbed mind by telling him that she would be all right, and today there is not a healthier woman in Cliffside.

This summer a patient came to my office who upon superficial examination seemed to have had an attack of acute indigestion the previous night, pain in stomach, nausea and vomited one time, headache and 2½ degrees of temperature. I purged him and depleted the congested stomach and next day he was much better; but two degrees of fever but no chill. I made a blood-slide, stained and examined and found an abundance of malaria of the Aestios-autumnal type, proper treatment instituted and patient was clear of the bugs in eight weeks. This season I have treated thirty-five cases of typhoid fever and some of them behaved very peculiarly, and several of the cases in whom the diagnosis of the complication or the diagnosis of the second existing disease was hard to understand and the diagnosis was cleared and the proper treatment given after the microscope turned on the light, and strange to say not but one chill in the whole number. Recently I had a case to come to me from some distance who had been treated for various ailments for the last two years, and my microscope told the sad story that she had been suffering from malaria for a long time. She had a very marked poikilocytosis, puffed and swollen ankles, and examination of heart showed a marked hæmic murmur, and a very muddy complexion and a tired languid expression. After two months' treatment the patient improved at least fifty per cent. and is now going every day.

The main object of this paper is to urge us all to make a more thorough examination of our patients, especially of the blood. Dr. John B. Deaver, of Philadelphia, very seldom ever operates on a patient until a complete blood examination is made. I know some of you won't agree with me, but a doctor needs a microscope in his office and needs to use it just as much as a country doctor needs a medicine case. We can't make a diagnosis intelligently of tuberculosis, malaria, hook-worm, and different intestinal parasites, etc., without one, and we are living now in a non-experimental age. An internist should never wait for a temperature in a case of appendicitis to refer the case to a surgeon, nor should the internist wait for the chill and fever to make a diagnosis of malaria. We have several types with which to deal and the combination of the several types in one case, and I find so many cases of severe infection which evidently from the appearance of the red corpuscles had existed for some time.

So with the aid we have, the short time it takes, the little knowledge required, and the little expense attached we should make an early diagnosis of parasitic and tropical diseases.

A Plea for a Better Knowledge of Drugs.

By Dr. C. J. McCombs, Stanley, N. C.

It is magnificent to watch the sculptor as he fashions from the block of stone the graceful curves of the human form, or delicately chisels away, here a little, and there a little, until the very expression of the human face is stamped on the imperishable marble. It is inspiring to listen to the sweet strains of music, and watch the skilled musician, as he deftly touches the keys of his instrument, sometimes rapid and tumultuous, sometimes soft, slow, and tender, yet ever blending the rapturous melodies that cause us to sit entranced under its magic spell; but the skill of the sculptor lies to a great extent in his knowledge of his tools, and the secret of the musician's skill is his almost perfect knowledge of the keyboard. And it behooves us as physicians to know our tools perfectly, when we attempt to correct the irregularities and perversions of the human system. For he who attempts to aid nature, as it battles with disease in all of its virulence, urged on by myriads of bacteria always present to distort the true course of nature, must be sure of his munitions of warfare. Scores of able men are laboring constantly in the bacteriological laboratories, and teaching us more and more of bacteria; numbers of other equally able men are toiling on patiently in the pathological laboratories and teaching us the human anatomy in its diseased state, and these are eminently important. We do not want to be understood as trying to minimize their importance in any degree; but of equal importance is a better way to combat disease, and instead of the pathologic, behold the physiologic. And who are the men who are laboring in this great cause? It is left to a very great degree in the hands of a few manufacturing chemists, who seem to view the whole situation from a mercenary standpoint. The idea of these chemists seems to be to get out more new preparations that are elegant and palatable, even if they accomplish this purpose at the expense of the real merit of the drug. Consequently the profession is flooded with hundreds of preparations that are almost worthless, or the best that can be said of them, is, that they are far outstripped in real merit by some ordinary pharmaceutical preparations that have been known to the profession for decades. There is little progress in this, for we are only succeeding in getting into the hands of the profession more and more preparations of uncertain or doubtful merit, and this, to a great degree, is the cause of certain of our profession being skeptical of the real merit in drugs. It is not very difficult to find in any locality, medical men who have little faith in the real efficacy of drugs. They prescribe or dispense, as the case may be, because they are forced to, if they continue to have patients; but they are not vitally interested in the preparations they use—they go on in a slipshod manner, as though the whole business is only a game of chance. Gentlemen, what is the cause of this? It is because these brethren have been feeding on husks. There is too much mental inertia in this direction. We find time for almost everything else, even for the discussion of baseball and automobiles; but when it comes to the real study of drugs, there is far too little time given to it. This is the secret of the high sounding, cut and dried, preparations being dished out to the laity so freely, and even a liberal amount of proprietaries are thrown in, and occasionally in original packages, too. It requires less thought, less trouble, and less time, and so we dish it out and rush on. But, gentlemen, is it true progress? I do not believe that there is a licensed physician in the State who cannot write a better prescription than a great many of the proprietaries, and quite a number, too, of the preparations put out by the manufacturing chemists, if he will only give the matter the proper time and thought. Now we do not know the other phases of our noble profession too well, or study them too much; but we do study drugs too little. We do not need more drugs, but we do need purer and more reliable preparations of these we already have. Instead of a thousand regular pharmaceuticals, and almost numberless preparations put out by the manufacturing chemists, the average physician does not use more than one hundred and fifty in his every day work, and he who has studied and knows the action of seventy-five reliable preparations is right well armed for the battle against disease. Now we do not wish to be understood to be against the appearance of new preparations, if they possess real merit.

If a new preparation is more reliable, safer, and in every way possesses more merit than the preparation that we already have, that is what we want; but if it is only a rehash of some preparation, which the profession has been using for decades, parading under a high sounding name, we have enough of these already, and in the street parlance, are "sufficiently amused." If the profession would discard every article put out by the manufacturing chemists that does not possess more merit than those in use already, then these new preparations would soon cease to appear, until a real meritorious one was found. And if the profession possessed a more perfect knowledge of drugs, substitution on the part of our pharmacists would also decrease, and the two professions would be brought closer together. Our most common drugs often possess merit in directions of which we never dreamed. And later when some popular preparation appears, we find that its merit depends upon the action of some drug that has been known for centuries, probably; but a new light has been thrown on it, and we find it doing service in a hitherto unknown field. Gentlemen, it behooves us to study drugs, and to stand by those that are reliable, and have real merit, and to discard all others. And here is a plea, though feeble as it is, for purer and more reliable preparations, and a better knowledge of these.

The Technique of Brain Surgery.*

By Henry Norris, M.D., and M. H. Biggs, M.D.,
Surgeons to the Rutherford Hospital,
Rutherfordton, N. C.

Cases of brain tumor or conditions demanding operative interference with the expectation of effecting a cure, or at least of prolonging life with an amelioration of distressing symptoms, are seldom referred to the surgeon except by skilled neurologists, who have given the patient the therapeutic test of mixed treatment to the physiological limit with, in some cases, an astonishing improvement. Hence such cases usually come to the operating table with thoroughly worked up histories, with the lesion pretty accurately located and with their minds made up that they are to be given their only chance. This we think is very proper, as craniotomies cannot be regarded except as grave operations, though so far as the purely mechanical technique goes, they are not as difficult to perform as some of the other major procedures in different parts of the body. Large osteoplastic openings can be made in the parietal, parietofrontal, temporal and occipital regions and a flap of sufficient size reflected to permit quite extensive explorations or removal of a neoplasm.

The method which we employ for outlining a flap to expose the motor area is that of Anderson and Mackin, as follows:

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*Read at the second annual meeting of the Seventh District Medical Society of North Carolina at Gastonia, Nov. 16th, 1911.

Anderson and Mackin suggest: (1) A median sagittal line from the glabella to the inion; (2) a frontal line from the mid-sagittal point to the depression just in front of the ear at the level of the upper border of the meatus; (3) a squamosal line from the most external point of the external angular process, at the level of the superior border of the orbit to the junction of the middle and lower thirds of the frontal line, and prolonged for about 3.7 cm. (1½ in.) behind the frontal line. The upper extremity of the central fissure was found by them to lie between the mid-sagittal point and a point 18 mm. (3.4 in.) behind it, and the lower extremity of this fissure they located near the squamosal line, about 18 mm. (3.4 in.) in front of its junction with the frontal line. The commencement of the lateral portion of the Sylvian fissure is not at a definite fixed point, but will usually be hit at a point 3.7-5 cm. (1½-2 in.) behind the angular process, the course of the horizontal portiou of this fissure corresponding closely to the squamosal line (Mills).

The entire head is shaved and the flap margins outlined by nitrate of silver lightly applied the night before operation. Blood pressure should be recorded before operation and every five to ten minutes during the operation by an assistant who is thoroughly familiar with taking pressure. Numerous appliances have been devised to make the opening of a skull a simple and safe thing, and the methods vary from a mallet and chisel section of the bone to a flap cut by a circular saw. The instruments which we use and consider the safest and quickest for craniotomies, when properly employed, are those designed by Cryer, which consist of a small conical trephine and a spiral cranial osteotome protected by a dural guard, which are mounted in a heavy handpiece and are driven by a dental surgical engine run either by hand power or electricity. The objections which have been made to these instruments are that there is too much danger of wounding the dura and brain, that too much bone is lost in the cutting, and that the apparatus is too cumbersome. We admit that much damage could be done with it in inexperienced hands, but this is also true of the various chisels and saws, and we have yet to see a case in which the Cryer osteotome was used in which good firm union did not occur. One becomes accustomed to its use and knows instinctively when the trephine reaches the inner table, and in using the osteotome it is readily apparent whether the dura is being cut or not, as this membrane is in plain sight all the time.

Ether is the anesthetic of choice, and should only be given by a trained anesthetist who has on cap, gown and gloves, and is perfectly sterile. The patient should have the head well elevated, so that he is almost in the sitting position; this lessens hemorrhage. The head is supported in an extension similar to the head rest used by photographers; which is made of thin bar steel and can be applied to any operating table; it should be well padded. Hemorrhage from the scalp is best controlled by a piece of rubber tubing about half an inch in diameter applied tightly around the head below the base of the flap and secured by a hemostat. The flap is then cut with one sweep of the knife, the incision being carried down to and including the periosteum. Care must be taken not to separate the scalp from the bony flap unless decompression is planned, and the periosteum should only be sufficiently separated to permit the passage of the osteotome. A small, motor driven, conical trephine is then applied to the skull at the bottom of the posterior limb of the proposed flap. This instrument must be used with the greatest care and should be held in the fingers like a pen. As the trephine penetrates the diploæ bleeding occurs and the instrument cuts more rapidly. It may be removed occasionally and a small probe used to determine the thickness of the skull. After removing the trephine button a careful examination must be made so as to be sure that the dura has not been cut. This is best accomplished by inspection and by introducing a small dural separator which is swept around in all directions. The drill with its dural guard is then introduced through the trephine opening and the cutting of the bone flap begun. The handpiece containing the drill should be firmly grasped and held at a right angle to the wound and pulled up against the skull as the drill revolves. In cutting the longitudinal line of the flap if the handpiece is carried more toward the opposite side than vertical a flap with an overlapping margin is made and the osteotome is carried farther away from the sinus. A small stream of normal saline solution allowed to flow gently into the wound keeps the operative field free from blood and at the same time cools the osteotome. Any undue bleeding should lead one to suspect that the dura has been injured and the osteotome should be stopped while an examination is made. On the completion of the cutting of the bone flap a chisel or periosteal elevator is introduced on either side and the base of the flap is fractured. The bone and attached scalp are wrapped in gauze and folded backward like an open trap door. Normal saline solution is then gently poured over the dura to remove any detritus. Observations are now made as to any bulging or absence of pulsation of the brain, and the color and character of the dura and its veins. The dura is seized with toothed forceps and after a small nick is made in it with a knife, a pair of curved, blunt pointed scissors are introduced and a dural flap somewhat smaller than the bone flap is cut. Hemorrhage from the pia may be controlled by cutting a bit of muscle off the scalp flap and laying it quickly over the bleeding vessel.

If a cortical tumor presents it may be removed by a spoon or the handle of a knife or it may be shelled out with the fingers. All unnecessary handling of the brain should be avoided and what sponging must be done should be dry, as saline solution or water produces enema. Trauma causes such swelling of the brain that it is difficult to suture the dura. If probing is deemed advisable a small blunt canula may be used, inserted very gently and pulled almost out before it is thrust in, in another direction. After the removal of a tumor if hemorrhage is free, gauze packing must be introduced in a sufficient amount to control hemorrhage. The dura should be sutured with silk and after the bone flap has been replaced a small drain of rubber tissue should be brought out through a stab wound rather than through the suture line. The scalp should be closed by interrupted silkworm gut sutures placed about one quarter of an inch apart, and care should be taken to slightly evert the edges of the wound, as this prevents oozing. Several layers of gauze are then applied with some absorbent cotton overlying and secured by a gauze bandage. We have found that if the bandage is wetted it will fit more snugly. Sufficient morphia should be given to keep the patient comfortable and water can be allowed as soon as the patient is well out of ether. Drainage can be removed in twenty-four hours. Scalp sutures can be taken out at the end of forty-eight to seventy-two hours. For operations upon the cerebellum the patient should be placed on the table so that he lies on the thorax and abdomen with the head flexed. An incision beginning at the tip of the left mastoid process and curving upward is carried across to the tip of the opposite mastoid and through all the tissues, including the periosteum. It is well in making this incision to cut only an inch or two at a time while an assistant controls hemorrhage by pressuire untl hemostats are applied. Some years ago one of us (Dr. Norris) devised a hemostat especially for craniotomies which has one blade sharpened so that the sharp blade can be thrust into the edge of the scalp while the other blade is passing underneath and the spurting vessel can readily be seized. Bleeding is very free and when from accessory sinuses quite alarming. The operator should have ready a number of small wooden sticks of soft pine and of various sizes with blunt ends to introduce into the foramina and thus plug these sinuses. If this precaution is not taken much time will be consumed and possibly a fatality from hemorrhage will occur while the operator is endeavoring to stop bleeding by wax or gauze packing. After the flap has been reflected the skull may be opened on the right or left side with a curved chisel and mallet and the bone cut away with rongeur forceps that are curved at a right angle. The occipital sinus can then be exposed and doubly ligated and the bony bridge intervening between the hemispheres removed. A dural flap is then cut as in a cerebral operation.

Decompression is indicated in cases of tumors too large to be removed, in recurrences and in cases where the general condition of the patient does not justify an attempt at removal, also in Jacksonian epilepsy. As the word implies the brain is freed from some compression by giving it more room, and this is accomplished by removing a portion of bone and replacing the scalp. It is usually done in the temporal region and the bone should be removed at the base of the flap. This operation produces a therapeutic hernia.

Response to Address of Welcome.*

By Dr. L. C. Allen, Hoschton, Ga.

Mr. President and Gentlemen:—

We deeply appreciate the cordial welcome extended to us here today. It falls to the lot of the doctor, in his every-day work, to see much of the sad side of life—much of sickness, sorrow, suffering, death, and distress. And it is a great relief to us to get a "day off" now and then, when we can have the blessed privilege of witnessing brighter scenes, have more congenial surroundings, and enjoy the company of normal, good-looking, *well* people. Such a day does our minds, our hearts, and our bodies good. So you may be assured, friends, that this body of doctors are in a mood to greatly appreciate the kind hospitality you extend to us.

The first time I ever saw Cornelia was many years ago, when I chanced to pass through here on the car on a trip to New York. When the brakeman called out "Cornelia," and the train stopped, I looked out of the car window, and not seeing any houses, nor any living person—nothing at all but trees and hills, I wondered what the train had stopped for. I just imagined that there must be living around here somewhere some buxom mountain lass, or some peculiar old lady, bearing the euphoneous cognomen of "Cornelia," and that the train had stopped at her house for something or other, and that the brakeman was calling for the said "Cornelia." But the train quickly moved on again, and I never found out what it stopped for, or who or what "Cornelia" was. But now look out upon those same hills, and behold a beautiful city! We see splendid business houses, élegant residences, handsome churches, magnificent hotels, schools, and banks and numerous evidences of growth and enterprise on every hand. In short, we see situated upon these beautiful hills a young, growing, splendid mountain city.

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*Delivered before the Ninth District Medical Society at Cornelia, Georgia.

Mr. President, I believe it was Robert Burns who said,

"O, would the Giver some power give us,
To see ourselves as others see us."

A very fine expression. But I would like to paraphrase it just for today, and, speaking to the laity here and everywhere, make it read as follows:

O, would the Giver some power give you,
To see yourselves as we doctors see you!

And then I would like to change it again, and say this:

O, would the Giver some power bestow upon thee,
To see us doctors as we ourselves do see.

In other words, I would have the public to see things from the doctors' view-point. I would like for the public to see, and comprehend, and consider seriously the problems that we doctors are grappling with. I would have them see themselves, their problems, see us, our problems, and see the true relation existing between the public and the doctors, and to see the tremendous amount of good that could be accomplished by all working in co-operation. I wish that all the laity could see the doctors, not as some do, as a necessary evil, as a medical trust, as a band of plunderers, seeking their own selfish ends, but to see us in the true light, as we really are, as a body of humanitarians, unselfishly trying to save people from their own folly, trying our best to teach people how to live, trying continually from day to day, and from week to week, and from year to year in our work to persuade them to practice the laws of hygeine that they may lead happy and useful and successful lives, and incidentally lessen *our* business, and diminish our income.

There are thousands of successful business men of today, leaders of industry, eloquent clergymen, successful merchants, bankers, educators, statesmen, and even reformers and philanthropists who are treating themselves worse than slaves were ever treated, apparently disregarding every law of hygeine. Ignorant to a large extent of the hygienic teachings of our day, they disregard even the dictates of common sense in the mad rush for wealth, power and fame. They over-tax their physical and mental strength, eat in a rush, consume the gray matter of the brain in adding up accounts, preparing speeches, planning enterprises; and in a thousand different ways exhaust their physical strength and their nervous energy. When such men die prematurely, as surely they must, their friends attribute their untimely death to an unscrutable Providence. Such remarks slander God, for in reality their death is solely due to a violation of God's laws. It is suicide, ignorance, and an indifferent neglect of the commonest laws of hygiene and self-preservation of the body and mind. Too many of us physicians go around preaching sanitation to others, and neglecting them ourselves. Thus our good precepts are destroyed by the teachings of our bad examples. And there are pious Christians, who pray fervently for the new kingdom of righteous, but whose life and habits are back in the dark ages.

The more enlightened and civilized a nation becomes, the more attention it gives to the health of the people. All history bears witness to the truth of this statement. With the ancient Egyptians and Israelites sanitation was under the protection of the ruling castes—the State and the priests. Sanitation was therefore largely regulated by religious laws. The laws of the Mosaic dispensation are, in large part, hygienic ones. Read Leviticus and note the truth of this statement. Circumcision was considered a religious rite, but Philo, the Jewish historian, says it was originally instituted as a sanitary measure—to promote cleanliness, to avoid carbuncle, to symbolize purity of heart, and the attainment of numerous offspring. The Jewish patriarchs, like Teddy Roosevelt, believed in large families.

In the classic age of Greece much attention was given to hygiene. The famous law-givers, Solon and Lycurgus, took pains that sanitary measures should have ample share in the public requirements of life in their day. Rules relating to cleanliness played a large role in these requirements of ancient civilization. In Rome, the all-conquering city that set upon seven hills, at the close of the Republic and the beginning of the Empire, when culture was at its height, sanitary measures attained their fullest bloom. Those magnificent public baths, whose great extent excites our wonder even unto this day, were sanitary arrangements for all the people, rich and poor. Those grand acquaducts, whose picturesque ruins may still be seen near Rome, were sanitary arrangements. In Athens, and in Alexandria the State issued sanitary laws. All these ancient sanitary measures were based upon empiricism, but were nevertheless often sensible and efficacious. Note in Leviticus how often people and things unclean were directed to be washed in *running water*, which is the only way to wash anything clean.

During the Dark Ages sanitary rules and regulations, and personal care of the body, together with culture and state religion, passed away altogether. A long, dismal period followed, in which fanaticism, superstition, and dogma held full sway. This continued until the beginning of the 17th century. Sanitary science, as we know it today, is, therefore, of quite modern origin. Much of it, indeed, has been evolved within the memory of men now living. But notwithstanding the rapid strides that sanitary science has been making of late, we still find among the people many relics of the superstitions of the Dark Ages. There are those to be found in every community who still believe in omens, and signs, and who eat assafœtida and onions to ward off disease, and who believe that epidemics are chastisements of an angered Deity, just as the ancient heathens believed. They are not sufficiently enlightened to know that disease is due to natural causes, such as dirt, germs, contagion, and the violation of God's inexorable laws.

Everywhere you go you find doctors—in every city, town and hamlet, and these doctors are all continually busy. Why is this true? Why are there so many busy doctors? Consider that in practically every home in the land the simplest laws of sanitation are utterly disregarded, that in nearly all homes, either through ignorance or indifference, the rules of healthful living are given no thought, and you will not need any other answer as to why there are so many doctors, and they all busy.

Consider with me for a moment a few facts along these lines. The amount of preventable sickness, suffering and death among the people is simply appalling. The question is one of tremendous importance. You hear much said about the tariff question; about the transportation question; about the trust problem, and the financial problem. Editors write about these questions; orators speak about them, and statesmen propose laws concerning them; and presidents write messages to Congress concerning them. But none of these questions, although of great moment, can equal in importance this question of the health of the American people.

Disease germs kill more than half the human race.

All germ diseases are preventable diseases. It follows that over half the deaths we have could be prevented. Is that not a startling statement? Some germ diseases are easily prevented, others are more difficult. But you can no more have a germ disease without the germ that produces it, than you can have a field of growing wheat without sowing the seed wheat. Louis Pasteur, the great Frenchman, said: "It is in the power of man to cause all parasitic diseases to disappear from the earth." The question arises, how are you going to do it? Nearly all germs that cause disease come from the bodies of sick people. Then the first great sanitary rule is simply this: *Destroy the germs that come from the bodies of the sick.* Yet how imperfectly is this important rule carried out! Few among the laity yet realize the importance of, and the methods of, destroying every germ that comes from the bodies of those who are sick with typhoid fever, pneumonia. diphtheria, scarlatina, consumption, hookworm, and other parasitic diseases. The medical profession should be, and is, an army of instructors for the people. The word "doctor" originally meant "teacher," and it means that yet.

Listen at these "cold, bare facts": 1,500,000 people must die within the United States during the next twelve months. Over 4,100 people will die this very day, and every day. There will be an average of 4,200,000 people constantly sick. "Over 5,000,000 homes, consisting of 25,000,000 people, will be made more or less wretched by sickness and death" There are in our country today 1,250,000 people afflicted with consumption alone, and each one carrying the germs capable of infecting other people. Many of these are ignorant negroes and foreigners, who cough up the germs and spit them out upon the streets, in street cars, in public places, and in their homes. Not knowing how to prevent it, these people spread tubercle bacilli in a hundred ways everywhere they go. It is difficult to estimate the cost of disease in dollars and cents, but one estimate that has been widely accepted places the cost of consumption to this Nation at one billion dollars ($1,000,000,000) a year. The human mind cannot comprehend this great sum. A few comparisons will better enable us to do so. It is more than two-fifths as much as the yearly wages of all the factory workers in the United States; it is nearly three times as much as the entire country spends upon its public schools and high schools.

There are at least 35,000 deaths from typhoid fever in this country every year, and about 400,000 cases of this disease annually. Estimated cost to the Nation $2,000,000 annually. The South—this Dixie Land that we love so well—is the greatest sufferer from this disease. *The ten States having the highest mortality rate from typhoid fever are situated South of the Potomic and East of the Mississippi rivers* (rate 79 per 100,000). Nowhere is typhoid more prevalent than right here in this Piedmont region.

Yet typhoid fever and consumption are preventable diseases. So, also, are malaria, yellow fever, diphtheria, the exanthemata, and that scourge of the South, hookworm, preventable diseases. If the theory that spoilt corn is the cause of pellagra proves true, then that disease should prove easily preventable.

Consider for a moment the tremendous amount of evil that comes from two venereal diseases—both preventable. Leaving out of consideration that horrible monster, syphilis, which is one of the iniquities of the fathers that is "visited upon the children unto the third and fourth generations," there are few things on this planet that cause more devilment than the gonococcus of Neiser. Experienced surgeons estimate that from 60 to 80% of all operations performed upon the sexual organs of women in our hospitals are due directly to this pestiverous germ. The veteran surgeon, Prince A. Morrow, tells us that 80 per cent. of operations upon the pelvic organs of *respectable* women are the result of gonorrheal infection, innocently transmitted by their husbands. Very few men who have gonorrhoea ever get completely cured of it. Over 20 years ago I heard Dr. Fluher, an able and experienced surgeon of New York, say that he had never seen a man who had ever had gonorrhoea but that he could get pus out of his urethra. Gentlemen, I have noticed the point ever since, and my limited experience in this line of work for 20 years testifies to the truth of Dr. Fluher's statement. A deep urethral gonorrhoea is very difficult, if not impossible, to cure. How are you going to cure it? How are you going to get at the gonococci deeply hidden in the follicles of the prostate gland? How are you going to render patulous a sealed up spermatic duct? There are men all over this country, plenty of them, who cannot beget children because their vas deferens has been occluded by a gonorrhoeal inflammation. Such men can perform every function, and they consider themselves entirely sound, but their semen contain no spermatazoa. Another thing: there are childless married women in every town, and hamlet, and neighborhood in the whole land, who, desirous of gratifying their natural motherly instinct, go from one doctor to another, from one specialist to another, having their pelvic organs treated, having their uteri dilated, curetted, tamponed, being massaged, and having electricity used, in the vain hope of being cured of their sterility, when, as a matter of fact, all in the world they need is a sound husband. That is not intended as a levity. It is a serious consideration. This thing is the cause of much domestic infelicity, the cause of many a scandle, of many a divorce, and many a suicide's grave. "One child sterility" is only too often the result of the industry of the germ of Neiser. Gonorrhoea is not the simple, harmless, local disease it was once considered to be. I think the profession has pretty thoroughly changed its views on this question. Not only are the germs found in the joints, causing gonorrhoeal arthritis, but they are found in the muscles, the heart, the kidneys, the brain How to rid the system of these microbes is an unsolved problem. Some able observers have lately advanced the idea that the increased number of sudden deaths now so common are the result of this germ. Yet the boys and young men of Cornelia here, and of Gainesville, yonder, and of Toccoa, and of every other place look upon the clap as a trivial affection, and less to be dreaded than an ordinary bad cold! Hence I say:

O, would the Giver some power give you,
To see yourselves as we doctors see you!

By the way, you might be interested in the origin of that word "clap." To clap, you know, means to make a sudden sound, as with the hands. We speak of a clap of thunder. The word looks like a strange one to apply to such a disease as gonorrhoea. It came about in this way. In ancient times people had what they called a "clap dish," a contrivance used like a cymbal for making a sudden noise. Persons afflicted with leprosy, or other foul disease, were required to carry with them at all times one of these clap-dishes, and to clap it whenever they came near toward any person, so as to give warning of their approach. Hence this disease was called the "clap disease," and finally the "clap." Don't you think that would be a good law now? I am sure it would be.

The most prolific cause of "race suicide," of which we hear a good deal of late, is sterilization through occlusion of the vas in men and the oviduct in women. It is going to wipe out the American negro as sure as fate, and is seriously threatening the population of France. Nearly all negro women have the clap, at some time or other, and many of them do not pay much attention to it. And the birth rate among them is diminishing at an astonishing rate. Old doctors tell us that before the war the negro race was practically free from venereal disease. Now they all have it, which is a serious menace to our white boys, and through them, after marriage, to our innocent daughters also. For, despite our best efforts, many boys are going to sow wild oats. Even Solomon, the wise, in his mature years, said: "Remember not against me *the sins of my youth*." No doubt he had reference to his youthful wild oats.

All physicians, and most intelligent laymen, know what a large role heredity plays in the causatton of disease. We all know that much sickness, misery, invalidism, imbecility, pauperism, Nordauism, and crime may be traced to this cause. Yet not a hand is turned to prevent it. Neither church or State gives any heed to it, and this prolific cause of trouble is allowed to go on unchecked from year to year. Christian civilization could learn much from the laws of the ancient Spartans. The Spartans idealized that which was beautiful and useful. Among them the sick were not allowed to marry, but the well were compelied to do so. The latter law was as strictly enforced as the former. Bachelors were publicly denounced, and after a certain age, were banished from society. No one of either sex was allowed to marry until the age of maturity. But here in Georgia we often behold the ridiculous spectacle of beardless boys and immature girls getting married, and becoming parents. As a result of their system of marriage the Spartans for 500 years produced the strongest and bravest men, and the most beautiful and healthy women that this world has ever seen.

The sports of the ancient Greeks were intended to develop the body, and the abdominal muscles were given special attention. Abrams contends, and with good reason, that constipation, hemorrhoids, hernia, and a multitude of other abnormalities are due to enfeebled abdominal muscles, and that this condition is a modern heritage. No doubt much of the excessive suffering now so often witnessed at child-birth could be largely prevented. A woman who has developed an excessive sensitiveness of the nervous system, and who has a feeble development of the osseous and muscular systems is not well qualified to perform the duties of wife and mother.

Then again, as preventable diseases we may mention that great class of common ailments known as digestive troubles—the dyspepsias—all caused by violating simple health laws, such as over-eating, imperfect mastication, bad cooking, eating impure and improper forms of food. Some one has said that most people dig their own graves with their knives and forks. Eighty thousand infants die in this country every year from improper feeding alone. Just think! Eighty thousand little graves! Eighty thousand heart-broken mothers—Rachels weeping for their children, and refusing to be comforted because tney are not. It would seem that the duty of the physicians is plain here. These deaths should be prevented. Teach the mothers of America how to feed their infants. Much missionary work is needed along this line.

Look for a moment at the diseases caused from drinking alcoholic beverages. True, we now have in Georgia, thanks largely to the able efforts of a member of this Society (Dr. Hardman), a State-wide prohibition law. But still the "goods" are shipped in from other States, and in some places in our State the "blind tiger" is doing his nefarious work unmolested, and the harm that alcohol is doing the health of the people of our State, and of all the States, is incalculable. The late Dr. Gedding, of Augusta, the able and rugged Dean of The Medical College of Georgia, used to say that "whiskey kills men in a thousand different ways." Every experienced physician knows the statement is true. We all know it causes acute and chronic gastritis; we know it is one of the most prolific causes of Bright's disease of the kidneys; we know it is a common cause of organic disease of the heart; we know its habitual use as a beverage brings about artheroma of the arteries; that it is a predisposing, and often the determining cause of apoplexy and paralysis; we know our insane asylums are full of people who went there from no other cause than strong drink; we know it causes cirrhosis of the liver; that its use predisposes to tuberculosis; that the habitual drinker has little chance to recover from an attack of typhoid fever, or pneumonia; we know that alcohol is a common cause of locomotor ataxia, multiple neuritis, pseudo-paresis, and various other nervous abnormalities. We know that, in addition to all this, it gives the surgeon much work. It is a common cause of automobile accidents, of fractured craniums, of gun-shot and stab wounds, and various other injuries that we are called upon to repair. All of which is preventable. I might go on indefinitely and point out how the great majority of all sickness is due strictly to preventable causes. Perhaps the most fruitful of all causes of disease is the lack of careful cleanliness, as witnessed in thousands of homes throughout the land. But I must not consume your time. Medicine of the future will be preventive medicine. It is our duty as physicians to teach the people these important truths; it is their duty to learn and heed the teaching. We are all mutually interested.

In conclusion, allow me to repeat that we are delighted to be in this beautiful mountain city today. I happen to hail from the extreme lower portion of the Ninth District, but I was partly raised in the mountains, and I have always loved the mountain country, and the mountain people. There is something grand, sublime, about mountain scenery that appeals to me. Poets, philosophers, and prophets of all ages have had a fondness for the mountains. When Jesus delivered His great sermon, that memorable sermon that has resounded down the ages, and will continue to resound down future ages as long as time shall last, he went up into a high mountain to pronounce it. And Moses, the great prophet, priest, leader, and law-giver of the Israelites, often went into the mountains. And when he wanted to view the "Promised Land," that beautiful Caanan beyond Jordan, he went up from the plains of Moab unto the mountain of Nebo, to the very top of Pisga, and there he beheld the beautiful lands beyond. But Moses became ill up there and, not having a physician along, he died, and his ashes are resting there until this day.

By Nebo's lonely mountain,
On this side Jordan's wave,
In a vale, in the land of Moab,
There lies his lonely grave.
And no man dug that sepulcher,
And no man saw it e'er,
For the angel of God upturned the sod,
And laid the dead man there.

The mountain people have long been noted for their superb physique, their quick perception, their independence of character, and their rugged honesty. The better class of them are men of principle, and this is the highest compliment I could pay them. Sometimes their pockets may be light, but *their hearts are always right.* Your mountain man has sand in his gizzard, and he is a patriot. It was the mountain men who fought and won the important battle of King's Mountain during the Revolutionary war, killing the haughty Furguson, and capturing his army. The mountain man breathes the spirit of that Scottish poet, himself a Highlander, who said:

"Breathes there a man with soul so dead,
Who to himself hath never said,
This is my own, my native land?
If such there be go mark him well;
For him no minstrel raptures swell;
High though his title, proud his name,
Boundless his wealth as wish can claim,
Despite those titles, power, and pelf,
The wretch, concentered all in self,
Living, shall forfeit fair ronown,
And, doubly dying, shall go down
To the vile earth from whence he sprung,
Unwept, unhonored, and unsung."

Thanking you again for your hearty welcome, we trust that you shall find a crowd of Georgia doctors not to be disagreeable guests.

A Certain Tabooed Aspect of Preventive Medicine.*

By Dr. Roy K. Flannagan, Richmond, Virginia,
Director of Inspections, State Health Department.

Scope of Preventive Medicine.

The scope of preventive medicine, as I understand it, covers all legitimate efforts which may be put forth to prevent the physical ills to which mankind is subject, whether these efforts are scientific (as we understand science) or purely empirical, or religious, or sociological, or psychological, no limiting clause prevents their use if the health and well being of man is conserved thereby.

Two Allies.

The regular physician and the sanitarian stand upon the same ethical plane in their diverse though allied endeavors, no remedial agency may be neglected by the doctor if the experience of careful men has proved its worth.

That the loudest exponents of a given method or principle are unworthy of the support and countenance of thoughtful men, does not make the truth they may hold less mighty or less prevailing in the long run.

The doctor, then, as well as the health official, should scan with care every agency which promises help to suffering man, that no effective weapon or efficient mode of attack be neglected in the age-long war against the causes that kill.

Knowing Versus Doing.

Neither is it sufficient simply for a doctor to have at hand a means of curing his patient, which he recognizes as potent for the work, *that means* must be applied, it is not the *knowing* but the *doing* that brings renewed health to stricken men. It is not, therefore, sufficient for the sanitary officer to have a good registration law, for instance, in his town or to be possessed of the knowledge necessary to revolutionize its public health work. The vital statistics must be gathered regularly, and the knowledge thus gained must be *used* if his people are ever to feel that his office is the blessing it was meant to be.

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*Read before the recent meeting of the Seaboard Mrdical Association of North Carolina and Virginia, held at Newport News, Va.

A. B. C. of Public Health.

The complete control of typhoid fever, as every informed person knows, is to be accomplished, if at all, solely by preventing human manure from gaining access to the mouths of people, therefore, the health official applies himself to the problem of proper sewage disposal, rendering the dry closets sanitary, guarding the water and milk supplies and destroying the breeding places of the disease-bearing fly.

Diphtheria and scarlet fever, more difficult to manage, must be carefully searched out and isolated.

Smallpox has no terrors for that wise community whose board of health insists on vaccinating its school children regularly; quarantine for smallpox has for 100 years been simply a concession to the foolishness and ignorance of the masses of men. No health officer believes for an instant that, as popularly practiced, quarantine against smallpox does the slightest good, and so on down the line of the alphabet of sanitation, but are these the only diseases that may be absolutely stopped?

Organic Disease Versus Germs.

Do typhoid fever, diphtheria, smallpox, measles, malaria and Bubonic plague constitute the complete roster of the important diseases we know how to prevent? I trow not. Look about you. What is the matter with John Smith? Oh! he has the rheumatism. What's the matter with Henry Jones? Oh! he has diabetes. Poor Tom Brown is down with Bright's Disease, and will never get up. Will Johnson, as you all know, has had a stroke of apoplexy, and Jim Robinson, sad to relate, has just been taken to Williamsburg with softening of the brain. Do tell! What an awful dispensation of Providence. Bosh!

Fixing the Responsibility.

The devil may have had something to do with the bulk of these diseases; the Lord, never. You know, and I know, that these men, cut down in their prime, but for one common cause would stand strong and well before us. Diverse as their ailments are, the same thing brought them down, and though Taboo be written large across the subject, and though commercialism and greed have built about the practical consideration of this common cause a Chinese wall, the fact remains that alcoholic drink is the arch purveyor of sickness and death to mankind. Say what you will, make all the allowance you please for what has been called the wild eyed agitator's exaggerated vaporings, but we, we medical men, can least of all blink the glaring truth that disease and death stalk hand in hand with the use of liquor as a beverage.

Some Noisy Figures.

Taking the mortality table of the City of Richmond for 1910, and making a few comparisons, we find that:

Deaths from typhoid fever were......	25
Deaths from apoplexy were............	192
Deaths from malaria were..............	6
Deaths from diabetes were..............	15
The combined deaths from measles, scarlet fever, diphtheria, whooping cough and croup were...........	119
While Bright's disease alone totalled	635
Grippe's number was......................	33
Violent deaths, including twelve suicides was..................................	168
Cancer killed..............................	109
While organic heart disease killed...	223
Smallpox killed no one, but legal electrocution was responsible for	8

Still Larger Figures.

To you who know how alcohol figures as a cause in apoplexy, diabetes, heart disease, Bright's disease and in deaths by violence, these figures tell an awful tale, and yet the story is not all told, for consumption, pneumonia and diseases contracted by exposure ran up a total of 867 deaths.

Do you have to call to your aid a vivid imagination to get a picture of the responsibility of alcoholics for a large part of this awful total? Am I drawing a correct inference? Does not your own experience furnish a hundred witnesses to its truth? And yet what have we, as a profession, done to stop the deadly work of this "procuress to the Lords of Hell?" We doctors! We conservators of the people's health! Where do we stand with reference to this primal cause of ruin?

An Attempt at Cure.

The Medical Society of Virginia is on record at its last session as favoring a State farm for inebriates and has appointed a committee to approach the Legislature in its favor. Can we logically ask for such action by the State and yet individually favor the indiscriminate use of the cause of this horrible devastation? Doctors cannot align themselves on the side of the sale of liquor as a beverage without doing violence to every principle for which as doctors they stand. I challenge your acceptance of the logic of the situation, and beg you to remember that since your highest mission is to conserve life therefore give your voice and influence squarely against this disease creating blight.

A Stand for Prevention.

Do I offer a program for your acceptance? Only this: Don't use the stuff for beverage purposes; you cannot properly advise a man to stop tippling for the good of his health when you are a tippler yourself; your talk is simply "hot air"; you know it, and he knows it. And in this connection let us, for God's sake and decency's sake, stop these liquor banquets at Medical Society Meetings. They are anachronistic. Men come together to consult how best to use the drugs of the pharmacopœia on others, and like children or savages, over-dose themselves with one of the most poisonous of the lot.

The Word of Wisdom.

When we have qualified ourselves by self-restraint and sobriety to give advice to those who are less wise in the use of this drug, we should not then hesitate to say publicly as well as privately that we know that alcohol works more havoc than all the germ diseases combined—and cite instances to prove it. It adds nothing to the solution of a tremendous problem to damn or laugh at the fellow who is fighting what he calls the Demon Rum in a way one does not approve, for until we can qualify by suggesting a more practical method of procedure, we should stand by, and at least give no comfort to the enemy. Keep always in mind that no friend to disease and death can be other than the natural foe of the true doctor.

Gall Bladder Disease.*

By L. A. Crowell, M.D., Lincolnton, N. C.

In accepting your invitation, Dr. McNary, to read a paper on gall bladder disease before the Caldwell County Medical Society, I felt it impossible with the time at my disposal to prepare anything of much interest. In fact, it would be presumption to entertain the hope of offering anything new or startling to this learned and experienced body of physicians. However, I shall feel fully repaid for my time if I succeed in drawing forth a discussion from those present on this, to my mind, the most important condition which we, as physicians and surgeons, are called upon to treat. The gall bladder, like the appendix, remains normal so long as there is no interference with its drainage, which can be readily seen from its anatomical position, placed "upside down as it were" under the liver is very easily interfered with.

This interference may occur in the following ways, viz: From a twist or kink in the cystic duct; tumors in neighborhood of cystic duct; the cystic duct may also become occluded by stone or by plugs of thickened bile. Experiments have proven that it is difficult to infect the gall bladder so long as the flow of bile is not interfered with. Any organism finding its way to the gall bladder speedily finds an exit and causes no trouble. Even stones may lie in the gall bladder for years without giving rise to symptoms, so long as they do not interfere with its drainage.

After stasis of its contents is once established the gall bladder becomes an easy prey to infection. Since the bacilli coli communis and the typhoid bacilli are the bacteria most frequently found in the gall bladder and in gall stones. the inference is that the gall bladder becomes infected from the intestinal canal. These bacteria may enter the gall bladder in two ways, viz.: First, and most frequently. along the common duct from the duodenum; second, by the blood current, chiefly through the portal vein. When infection has been produced symptoms appear. The symptoms of gall bladder disease may be enumerated as follows:

Jaundice.
Enlargement of liver.
Indigestion.
Nausea and vomiting.
Chills and fever.
Pain, local, referred and colic.

Notwithstanding the fact that a great many physicians consider jaundice a very important symptom of gall bladder disease to my mind it is one of the rarest symptoms. Murphy, who has had considerable experience along this line, says that jaundice was present in only fourteen per cent. of his cases.

I have seen a number of cases where the gall bladder was full of stones, and others in which it was full of pus with stone or stones lodged in cystic duct, and yet these patients had never had jaundice.

So, if we are to wait for the so-called typical symptoms of gall stones "colic followed by jaundice" I fear we will fail to make the diagnosis at all in the majority of these cases.

Enlargement of liver as a symptom of gall bladder disease, I have found quite often. Mayo Robson, speaking of this condition, says that it is due to obstruction of the common or hepatic ducts. But in many of my cases, although the liver was greatly enlarged, there was no obstruction in either the common or hepatic ducts. In these cases the liver quickly returned to normal after a choleocystotomy.

Indigestion, to my mind, is the most important symptom of this condition. It is well, always, to look with suspicion on all cases of chronic indigestion which fail to respond to the ordinary means of treatment, more especially if they date back to an attack of typhoid fever.

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*Read by invitation at Lenoir before Caldwell County Medical Society, December 7th, 1911.

Nausea and vomiting, which are symptoms of indigestion, are found quite frequently as symptoms of gall bladder disease. Indeed, it is their frequency which leads us to suspect the stomach as the offending organ.

In this connection, permit me to report the following case:

Mrs. C—, a corpulent lady, aged 35, was referred to me by her physician. The history of her case was about as follows:

For a week she had vomited continuously, was unable even to retain water, every particle of food taken into her stomach gave intense pain, had lost a great deal of flesh and from her symptoms I suspected malignancy. I gave her a test meal, and examining contents I found it perfectly normal.

I placed this patient upon an expectant line of treatment and sent her home. Two days later I received from her physician two gall stones about the size of end of little finger. All symptoms immediately disappeared after the passage of these stones. The patient is very rapidly regaining her former weight and strength.

Chills and Fever.—Frequently chills and fever are symptoms of importance. In one case treated by me these symptoms were well marked and appeared at regular intervals every other day, so that I suspected malarial fever and examined the blood for the plasmodium, which I failed to find. On examining my patient a little more closely a great deal of tenderness was found in region of gall bladder when the condition was properly diagnosed, the gall bladder opened and 400 stones and a quantity of pus removed. After operation her symptoms cleared up promptly. As a rule, chills, fever and sweat are symptoms of a high grade of infection and are more likely to be present in a marked degree in cases where the infection is located in the hepatic or common ducts. While in cases where the trouble is limited to the gall bladder, constitutional symptoms are likely to be more mild.

Tumor.—Another important symptom is tumor appearing as a pear-shaped mass in region of gall bladder and originating from some obstruction to cystic duct. But if this tumor be accompanied by jaundice it suggests malignancy.

Pain —The pain in gall bladder disease may present itself in three different forms. First, as a local pain or tenderness in region of gall bladder; second, colic or acute attacks of severe pain and referred pain. The local pain is best elicited by pushing the finger tips well up under the costal margin on right side, at same time directing patient to take a deep breath. The moment the liver or gall bladder impinges upon the tips of the fingers, patient experiences a deep seated pain which is not limited to the gall bladder, but may radiate over the entire hepatic region. The attack of pain known as hepatic colic comes on suddenly without regard to diet or time of day, is very severe, is located in the epigastric or midline, radiates upward and backward to the shoulder blades, especially the right, differing from the pain of appendicitis which also begins in the epigastric region and radiates downward rather than upward.

Boas speaks of a point of referred pain or tenderness which he considers of very great importance in the diagnosis of gall bladder conditions, especially in obscure cases where the other symptoms are vague and indefinite. This point is located on right side behind on a level with the twelfth dorsal vertebra two or three finger breadths from the spine. We should always make search for this tender point which can not only be found during the acute attacks but in the interval as well. I have paid special attention to this point for some while and consider it almost pathognomonic of gall bladder trouble.

Treatment.—While there is no medical treatment for these conditions very much can be done for these patients to make them more comfortable until they can be treated surgically. The same general treatment applies here as in acute inflammatory conditions involving the peritonaeum from other causes. Patient should be kept absolutely quiet, should not be allowed anything by the stomach, not even water, but nourished by the bowel instead. Experience has proven that those patients suffer least who are not allowed to take nourishment into their stomachs. The attacks of hepatic colic are best relieved by gastric lavage. Cases have been relieved by this means where large doses of morphia have failed. As to the technique of the operation we should make an incision along the outer border of the right rectus muscle, beginning at costal margin and extending downward as far as the condition present indicates. After getting inside we should do as we do in all cases, meet the conditions as they arise. No surgeon has acquired that degree of surgical skill that enables him to foretell what he expects to do when he gets inside the belly. Especially does this statement apply to acute conditions.

I feel that I would be better enabled to explain the technique used in these cases by reporting one of my recent cases.

Mrs. A., aged 42, weight 165, married 23 years, mother of 10 children. During May last patient nursed sister for three weeks ill with typhoid. One week after her return home typhoid fever developed which ran a very mild course. After recovering from the attack of typhoid, patient frequently had severe attacks of pain in stomach, especially after a hearty meal.

Pain located in epigastric region and radiated to right hypochondric region and right shoulder blade. Often the pain was simultaneously at region of apex of heart. The attacks of pain recurred frequently from their first appearance in July until October 15th, when patient awoke at midnight with the most severe attack she had ever experienced. This attack was accompanied by nausea and vomiting and slight elevation of temperature. Her physician was called at this time and gave large doses of morphia, resulting in slight relief. The next day I saw her and found her liver much enlarged—so much so that the gall bladder tumor was found down at McBurney's point. Patient was immediately sent to hospital and prepared for an exploratery laparotomy, which was done the day following; a sand bag was placed under the back little above the level of the normal liver. Skin was prepared by painting with compound tincture of iodine. An incision beginning a costal margin and extending downward five inches along outer border of right rectus muscle was made. The gall bladder was found and brought into the incision easily. It was found moderately full of liquid. Examination of cystic duct revealed a stone, common and hepatic ducts were found clear.

The gall bladder was walled off by swabs of gauze; this being done, a small trocar with rubber tube attached was pushed into the gall bladder and the fluid consisting of pus with a small quantity of bile drawn off. The gall bladder was more thoroughly cleansed by wisps of gauze. The gall stone in cystic duct was found to be tightly wedged in position. It was with difficulty pushed or milked back into the gall bladder. A rubber tube one-third inch in diameter, wrapped first with iodoform gauze and over this with rubber tissue, was then pushed well into gall bladder. The opening in gall bladder was now closed by a purse string suture of cat gut around tube, tucking edges of incision well in before drawing suture tight. A second purse string suture was placed, which took a small bite in rubber tissue and gauze covering tube, thereby anchoring tube in gall bladder. Gall bladder was anchored to peritonaeum by two sutures of cat gut, one on either side of drainage tube. The balance of incision was closed up in the usual way, using cat gut for all layers except the skin where silk worm gut was used. Bile began to discharge from tube two hours from time patient was put to bed, continuing to discharge, quantity gradually diminishing until tube came away on tenth day. This patient left hospital on twentieth day with wound healed and in perfect health.

The Nature of Puerperal Eclampsia; Its Similarity to Chloroform Poisoning, and Its Rational Treatment.*

By J. H. Hiden, M.D., Pungoteague, Va.

In presenting the subject of puerperal eclampsia it is not my intention to give any symmetrical discussion or comprehensive view of this dreaded malady, but simply to present a fragmentary sketch of some recent views of eclampsia in its relation to the toxemias of pregnancy. Apart from this relation puerperal eclampsia has always been more or less clouded with mystery. And through this mystery it has been a subject of great attraction as well as one of vital interest to the general practitioner. The subject, moreover, has presented for solution so many complex problems, and is seen from so many different standpoints that harmony in opinion can only come by the repeated observations of scientific research. There are few subjects within the bounds of medical science better adapted to produce more varied and vigorous discussions with a larger supply of questionable theories. Some of these theories are advanced, accepted by many for a season, then exchanged for others, in the light of new discoveries, and finally, in the evolution of thought, restored to their former places.

Its Etiology.—Among the various theories advanced in regard to the etiology of puerperal eclampsia may be found the following: Mechanical pressure from the gravid uterus; fœtal products of excrementitious matter; toxic products and biliary salts of fœtal origin; metabolic disorders from the placental ferments; increased metabolism; uremia; leucomains in the blood; ptomaines in the general circulation; impaired functions of the glandular organs; deficient secretion of the thyroid gland; hepatic cellular degeneration; faulty action of the hepatic functions in the process of metabolism; renal insufficiency; renal congestion; nephritis; more or less sensitive condition of the motor areas of the crebrum, &c.

In presenting these conceptions of the etiology of eclampsia, we may at first sight wonder how so many varied and conflicting opinions could have arisen; but a careful and comprehensive view of the subject will soon clear up the mystery. In the great struggle to find the primary cause of eclampsia too much importance is often attached to some phase of symptoms, or to some feature in the pathological findings. And the specialist, though accomplishing much in enlarging our field of view in certain directions, often serves to obscure it in others. The result of such varied observations naturally ends in a chaos of professional opinions. In order to appreciate this more clearly, as well as to get a clearer conception of the subject in question, let us look into the pathology of such conditions as are called eclampsia.

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*Read before the Accomac Medical Society, September, 1911.

The Pathology.—Though this condition presents various disorders, involving the nervous system, the glandular organs, mucous membranes, blood vessels, and even the blood itself in many cases, yet it usually presents a definite pathology. And this is mostly of a degenerative character. Connected with these processes of degeneration are found congestions, hemorrhages from mucous membranes, glandular organs and the cerebrum in the post-mortem findings. Indeed, the majority of the vital organs of the body suffer more or less with either granulations of some sort or fatty and granular degenerations. Of these organs the kidneys are the most frequently involved, showing some disorder, varying from a slight disturbance in the epithelial structures, to the breaking down of the uriniferous tubules in about 95 per cent. of all the fatal cases. The frequency of these pathological findings, a few years ago, led the profession generally to believe that the primary cause of eclampsia was to be found in renal insufficiency. Other factors, however, have recently engaged our attention, and have served to unsettle this commonly accepted theory. And the question has arisen as to whether these post-mortem findings in the kidneys are the cause or effect of the eclamptic condition. Many phases of the subject suggest the latter. In the pre-eclamptic stage blood changes of the disintegrating type, approaching at times the point of pernicious anemia, are well worthy of due consideration. Moreover, degenerative lesions in the walls of blood vessels throughout the vascular system, culminating at times in the rupture of an artery, and a disastrous hemorrhage, either in the brain, retina of the eye, or elsewhere are considerations which cannot be ignored. The heart itself often suffers with a degree of granular and fatty degeneration. And the liver, especially, is the seat of very marked changes. Here we find the periphery of the hepatic lobules involved in the degenerative processes, with a more pronounced extension of the process toward the center of each. Hemorrhages from capillary degeneration are also found, and the cell destruction within the liver lobules often extends to a marked necrosis. Indeed, in many of the cases in which the liver has undergone an advanced degree of fatty degeneration the entire organ resembles closely acute yellow atrophy of the liver.

Now in reflecting upon these pathological findings from the organs of eclamptic patients the question may arise as to how much of this pathology may be partly due to reckless or injudicious use of drugs—such as are so often used for the controlling of convulsions. This is by no means a trivial question when we consider how often morphine, chloroform and other drugs are used in repeated, heroic doses for this purpose. Of these drugs I wish to call especial attention to the use of chloroform in regard to its action upon the vital organs of the human body, especially in eclamptic patients. Within the last few years the pathology of delayed chloroform poisoning has attracted much attention, owing partly to its resemblance to the microscopical findings in the autopsies of eclamptic cases. Indeed, the symptoms themselves of delayed chloroform poisoning are not unlike those found in many cases of eclampsia. In these we have "progressive weakness, pallor, cyanosis, restlessness, vomiting, delirium, convulsions, stupor, coma and death," (Cragin-Hull). In its pathology we find the degenerative changes strikingly like those found in eclamptic patients. Of the various organs involved the liver and kidneys suffer the most. In the former the organ becomes yellow, fatty with scattered hemorrhages, often under its capsule and throughout its substance. The central portion of the lobules show marked necrosis and even the periphery of these show changes of fatty and granular degeneration. The cells also along the central vein are almost obliterated, leaving a mere granular appearance. And the entire picture of the organ resembles closely that of acute yellow atrophy of the liver. Next to the liver the kidneys show the most marked changes of degeneration, and in some cases even greater involvement. The organs are swollen, congested with occasional hemorrhages under the capsule and about the tubules and pelvis. Microscopically, the cells of the tubules are swollen, granular and fatty, even filling the lumen with granular material and fat globules. The heart, though less involved, shows evidences of fatty degeneration.

Now these striking resemblances in the pathology of cases of eclampsia and in that of delayed chloroform poisoning have created so much interest in the profession as to call forth efforts through animal experimentation to produce similar pathological changes in dogs, rabbits, and guinea pigs by chloroform anesthesia. The experiments were made by various competent observers, including the work of Stiles, McDonald, Howland and Whipple (Cragin-Hull). And it has been conclusively shown that almost exactly the same pathological changes in these animals can be produced at will by chloroform anesthesia. The capillary hemorrhages in the substance of the liver, the fatty and granular degenerations, and even the central necrosis within the hepatic lobules can be easily produced in varying degrees, according to the length of time and frequency in the administration of the anesthetic. Indeed, the pathological lesions in the heart, liver, and kidneys are not only similar to those found in man from chloroform poisoning, but are strikingly like those found in fatal cases of eclamptic patients.

Now to my mind these facts in regard to the similarity in the pathology of eclampsia, chloroform poisoning in man and chloroform anesthesia in animals furnish conclusive evidence that the general pathology in all three of the above conditions are the local lesions—the degenerative processes of a pronounced toxemia. Eclampsia is, then, the culminating storm of a toxemic condition—an auto-intoxication of varied origin. Seen from this standpoint much of its mystery disappears, and its treatment is no longer empirical. Indeed, with a clear conception of a toxemia before us the rational treatment becomes evident—namely, the avoiding such drugs and measures as materially burden the system, increase degenerative changes and interfere with the natural processes of toxic elimination. In view of what has been said, chlorform, then, if used at all, should be handled with great caution, as its careless or prolonged use is almost sure to promote or increase the very pathological lesions in eclamptic patients which we wish to avoid, or at least to hold in check.

Again, having now settled, to our satisfaction, the question as to the dangers from the use of chloroform in eclampsia, we naturally inquire into the wisdom of using ether. Here, again, efforts have been made to test the effects of ether anesthesia through animal experimentation and compare these with those of chloroform anesthesia. Among the various writers who have experimented along this line we have the works of Bandler, Lengeman, Leppman, and, more recently, the work of Cragin and Hull, of New York, to whom I am indebted for much of this information. These observers made very careful and repeated experiments in anesthetizing dogs with ether. And in these experiments the dogs were kept under the anesthetic for two or three hours, and in some of them the process was repeated on two or three successive days. Control animals were also used for the most accurate comparisons. The result was, when the animals were killed, and the heart, kidneys and liver examined, these organs showed little or no deviation from the normal. There was no discoloration of the liver substance, no necrosis of the lobules, nor were there any decided degenerative changes of the cells, or scattered hemorrhages throughout this organ. The same was true in regard to the heart and kidneys (Cragin-Hull).

Now with these facts before us it seems to me that there should be no longer a doubt as to the superiority of ether over chloroform as an anesthetic in cases of eclampsia. And so I urge the use of ether in such cases whenever an anesthetic is required.

Another feature of importance in the support of the toxemic view of eclampsia is found in some delicate tests of the urine of eclamptic patients. In these tests it has been found that the ratio in the nitrogen products are more or less disturbed in cases of eclampsia. For instance, the nitrogen urea is considerably lessened—even to the extent, in some cases, of fifty per cent., while the ammonia nitrogen is usually higher, and the undetermined nitrogen is constantly higher than in normal urine (Davis and Foulkrod). Such tests have been conducted by the most competent observers, including the work of Zweifel, Ewing, Wolf, Williams and others, and their findings can hardly be questioned. Moreover, other experiments upon the urine and blood of eclamptic patients are well worthy of our consideration. As far back as 1892 Chamberlent, while working under the directions of Tarnier, published the following conclusions:

1. "Pregnancy tends to the retention of poisons in the body, for the urine of the pregnant woman is less poisonous than normal."

2. "In eclampsia the elimination of physiological poisons is hindered, and the urine is less poisonous than normal. It is also less poisonous than the urine of normally pregnant women."

3. "The blood serum of the eclamptic is considerably more poisonous than normal, and its toxicity is in direct proportion to that of the urine."

Here the author evidently intended to say that the toxicity of the blood serum was in inverse proportion to that of the urine, instead of direct proportion.

Treatment.—Now, having accepted the view that eclampsia is the fulminating storm of a general toxemia, and that the pathological lesions in the various organs are only local manifestations of a general disturbance, I urge that no symptomatic treatment in eclampsia should be adopted without due consideration of these facts. To simply control convulsions by the shortest and easiest methods with little or no regard to the real nature of the trouble, or to its progressively degenerative lesions, is to my mind utterly irrational. Controlling convulsions is, indeed, important, but while doing so such measures should be taken as furnish nature the most potent aid in her efforts of elimination. Many cases call for immediate delivery, and under such conditions ether serves a double purpose. For controlling convulsions, relieving vascular tension and furnishing a sedative to the motor areas we have potent remedies in the hypodermic use of moderate doses of morphine and veratrum, and in some cases, occasional doses of nitroglycerine. To this list might be added chloral hydrate and the bromides with benefit. For relieving the kidneys and removing toxic products normal salt solutions, given either subcutaneously or by the drop method from the bowel, may be often helpful. Here, also, diuretics and purgatives, such as calomel, castor oil, the salines, and also the hot pack should not be forgotten. In plethoric patients in which it seems advisable to bleed, the normal salt solutions following venesection are doubly indicated.

In conclusion, I wish to say, by observing such measures as have been recommended the maternal mortality in my last eleven cases of puerperal eclampsia has been nothing.

Tuberculosis of Bone.

By Addison G. Brenizer, A.B., M.D., Surgeon to the Charlotte Sanatorium, Charlotte, N. C.

GENERAL IDEAS ON THE PATHOLOGICAL PHYSIOLOGY OF THE OSSEOUS SYSTEM.

Exact rules cannot be formulated as to the reaction of the osseous system against microbic infections, and the clinic cannot be subjected minutely to the laws elaborated by experimental physiology.

However, it is important to gain some sort of a support from the physiological facts in order to understand the evolution of lesions of the different parts which go to make up a bone. Bone, reacting against an infection constitutes a solid, that is, the lesions of the periosteum are not independent of the osseous tissue, any more than those of the marrow develop without involving the osseous tissue and the periosteum.

This community of reaction is all the more manifest when the bone is in a state of evolution; that is the young bone and a bone reacting under the influence of an irritation whether it is mechanical, chemical or infectious; for here the irritated adult bone behaves as does the young bone.

Let us therefore look briefly at the pathological physiology of:

The periosteum.
The epiphyseal cartilages.
The marrow.
The articular cartilages.
The osseous tissue proper.

The young periosteum, fertile through its age or made fertile by an irritation is active over its deep surface, the osteogenetic layer of Ollier, the so-called sub-periosteal marrow.

Irritation of the periosteum, when it is mild, determines a new production of osseous tissue, often useful but at times prolific; an hyperostosis. This production may become disordinated and, when it manifests itself near an articulation, is a cause of ankylosis against which the surgeon is offered much embarrassment in preventing.

The mechanical destruction of the periosteum does not determine lesions of the underlying bone unless applied to an extensive surface; when it is localized it does not bring about any notable trouble in the bone. If the osteonegic layer persist, it reproduces rapidly enough a fertile periosteum. When a vast area is destroyed by an intense irritation, such as may be brought about by an acute suppuration, the osteogenic layer is destroyed and the periosteum remains only as a fibrous membrane incapable of co-operating in the regeneration of the diseased bone.

When preserved where possible by the surgeon, the periosteum along with the marrow may produce an integral regeneration of a long bone, example: a longitudinal resection of the greater part of the circumference of a diaphysis.

Thus, the periosteum and perichondrium should be preserved in the cases of epiphyseal resection where the articular surfaces may be perfectly reconstituted and where one wishes to obtain mobility in the new joints, but on the other hand the perichondrium should be removed and the two sectioned bones brought together, where it is desired to produce an ankylosis.

In all interventions on the osseous system, the periosteum may serve as a protecting membrane for important organs or structures of the part upon which one is operating, as vessels, nerves, etc. The so-called sub-periosteal method is therefore one of prudence and facility.

The epiphyseal cartilages produce the growth of the bone in length.

An irritation may be direct or indirect

When it is direct it is necessary that it be of a feeble intensity to cause an exaggeration of the osseous tissue, as is seen in the increased length in cases of an attenuated chronic inflammation, such as tuberculous osteomyelitis. But if the irritation is intense, the cartilage is destroyed with an arrest in growth. An indirect irritation, the primary focus being the periosteum, the marrow or the surrounding soft parts, accentuates the production of osseous tissue. The primary focus is usually in the bulbar portion of the bone, that is the portion bordering the epiphyseal cartilage. The bulb, the juxto-epiphyseal bone, is the more readily involved when the individual is in a period of growth. And for each bone taken in particular, an infection involves through preference the bone which is functionally the most active: the extremities distal to the elbow but proximal to the knee are usually involved.

A total disappearance of a juxto-epiphyseal cartilage, whether it be pathological or operatory brings about, if it be in a stage of growth, a complete arrest in the development of the corresponding epiphysis, hence the danger of an intra-epiphyseal resection in a child. A partial destruction limited to a part of the cartilage determines abnormal curvatures of the bone at the level of the epiphysis, corresponding to the arrest in development on that side. An example of such a deformity is the pathological, traumatic or operatory genu valgum.

The marrow, in surgical pathology, should not be considered as in macroscopical anatomy, that is to say, looked upon as limited to the medullary cavity. It bathes the whole bone from the sub-periosteal layer of cells to the medullary cavity through the Haversian canals. It may thus propagate an infection throughout the entire bone, as Ollier remarked, "In an infection the marrow, the bath for the bone, becomes a bath of pus."

The marrow possesses by virtue of its vascular richness a considerable power of absorption, hence the grave general symptoms, and a ready production of a pyemia when the infection has involved the medullary cavity. Besides, this action upon the organism in general is explained through the damage done to the hematopoetic tissue.

Under the influence of a non-infectious irritation the marrow, even in the adult, resumes rapidly its embryonic character, which may end in ossification. Through this transformation there is first a dissolution of the osseous substance already formed and later a proliferation of the medullary cells. Ollier calls this process medullization.

It has been demonstrated that the destruction of the marrow does not bring about a necrosis of the bone, but that the marrow is regenerated from the medullary elements contained in the Haversian canals. Here as with the periosteum, the destruction must not be too extensive, especially as is determined by an infection, because in this event the suppression of the marrow may bring about the destruction of the bordering bone and produce an extensive sequestrization, the central sequestra.

In the interior of the medullary cavity infectious foci may persist for a long time determining small central abscesses, giving rise to a tenacious medullitis which is sometimes tolerated for a long time producing no more symptoms than neuralgic pains.

The ablation of an articular cartilage in an adult, from the standpoint of physiology, stops growth; from the standpoint of pathology favors ankylosis of the articulation to which the new osseous surfaces constitute a part. Inflammatory lesions, especially tuberculosis, never begin in the articular cartilages themselves, but the cartilages are attacked on their deep surfaces, the process taking its origin in the sub-jacent bony tissue of the epiphysis. This is always the condition in a tuberculous osteoarthritis, the tumor albus.

Lesions of the osseous tissue proper determined by infectious agents manifest themselves by a destruction of the anatomical elements, as the rarifying osteitis or necrosing osteitis or by the production of new bone, the hyperplastic osteitis, or condensing osteitis; habitually the two processes are associated.

In the rarifying osteitis the process of destruction is exercised upon the anatomic elements. The destruction of these elements constitutes a necrosis, the product of which is the sequestrum. In the hyperplastic osteitis the osseous tissue proper aids little in the reconstruction of the bone. The periosteum followed by the marrow presides in the work of regeneration of bone.

From the view point of pathological anatomy and surgery these two types of osteitis can not be separated. There exists in bone as in all inflamed tissues, destructive processes, and at the same time reconstructive processes, and both bear the same relation to the vascularization of the new as well as the old production of growth.

Tuberculosis of Bone.

The primary focus of tuberculosis of bone begins in the osseous tissue proper, it is primarily a fibrous osteitis.

The tubercle bacillus attacks from preference bone rich in spongy tissue and by order of frequence, according to Nelaton, the vertebrae, the tibia, the femur, the humerus, the metacarpal and metatarsal phalanges, the sternum, the iliac bones and the petrous portion of the temporal bone.

In long bones the point first attacked is the epiphysis, and according to Ollier the epiphysis the most fertile. Tuberculosis is rarely diaphyseal in the small long bones.

Tuberculous osteitis is in the beginning a rarifying osteitis; its course is slow, producing a cheesy-like substance breaking up, as it goes, the elements first struck and does not determine a great reaction on the surrounding bony tissue. The necrosed portions are ordinarily little voluminous and the sequestra produced are themselves rarified in the process. It is easy to see these different characters in the form designated by Nelaton as the encysted tubercle. This form is frequent; one finds it often in the epiphysis of the femur after a resection of the knee. On sawing open the bone a cavity filled with caseous and fungous masses presents itself, comparable at times to putty. If one breaks the fungosities between the fingers, one can feel grains of necrosed osseous tissue. More rarely in the center of the cavity a larger sequestrum penetrates into the interior by its vascular fungosities which attach it to the wall of the cavity. The wall is covered by a veritable false membrane, forming a pseudocyst, the surrounding tissue is little modified, soft and friable or sclerosed.

Histologically tuberculous granulation tissue occupies the bony spaces which soon become filled with debris, while the capillaries are obliterated and this obliteration leads to a necrosis and sequestra formation which in turn is broken up in the process.

The tubercle evolves through resorption and transformation into fibrous tissue.

It may be transformed into a purulent or serous abscess.

It may open to the exterior by a simple fistula or through the intermediary of a spreading abscess.

It may open into an articulation or a neighboring cavity or an adjacent organ.

The two first terminations are exceptional: tuberculosis of bone has a natural trndency to open on the exterior.

The tuberculous fistula presents rarely a direct course but more frequently a tortuous irregular extent covered with fungosities. Its orifice in the depth corresponds with the break in the periosteum and the bone where the rarifying process of the tubercle has made its way to the circumference. The external orifice presents gaping borders, often with irregular sclerosed lips, drawing as by retraction the neighboring soft parts into the depth. The fungosities frequently surmount the orifice from which flows continuously and with a disasperating chronicity a thin purulent liquid.

The ossifluent abscess or abscess by congestion studied classically in connection with Pott's Disease, is a veritable tuberculous tumor, a tuberculoma (Lannelongue) beginning in the bone and invading the soft parts like a malignant neoplasm, whose external surface is fertile in active prolongations, while the internal surface of the capsule secretes and breaks down into an abundant more or less thick and caseous material.

An opening into joints of a caseous tubercle is a frequent termination and is the origin of the tuberculous osteo-arthritis, the tumor albus.

Principle Forms.—Osteo-tuberculosis being essentially polymorphous, it is difficult to separate the different varieties; however, besides the encysted tubercle which I have already described a division of the clinical forms is made:

Tuberculous infiltration.

Tuberculous caries.

Tuberculosis of the diaphysis, the spinoventosa.

Acute tuberculous osteitis.

Tuberculous infiltration is a diffuse osteitis invading the bone with a variable intensity according to the depth of the lesion, a whole portion of spongy tissue, for example, the whole of an epiphysis. The bone is hollowed out into numerous cavities in which are included sequestra which have resisted the infiltration. If one represents a longitudinal section of an epiphysis of the femur, one sees on tracing the bone from the diaphysis to the epiphysis, that is going from the least to the most diseased bone:

A zone of congestion and cellular proliferation. The bone at this level may heal. It is important to recognize this in knowing just where to end a resection of a tuberculous focus.

A zone of soft bone, burrowed with tuberculous follicles, describing gray opaline spots. The fungosities have dissociated the osseous tissue, softened it but the vessels have been respected.

A zone of purulent infiltration with yellow spots formed by the softened material filling the areolar spaces, the walls of which show an interstitial hypertrophy and the vessels are obliterated. There has been a brusque breaking down of confluent granulations, striking with necrosis a whole large area by the destruction of the vessels.

Tuberculous caries is a general term, under which are grouped the very different manifestations of a chronic osteitis. From a historical standpoint we know it was necessary that Koch's bacillus be discovered in the fungosities of the caries before it was recognized that the lesions were due to tuberculosis. For Lannelongue it is especially characterized by a rarifying osteitis and the worm-eaten appearance of the bone. After an increase in the caliber of the canals these are invaded by pus. The course is rapid and occurs chiefly in cachetic subjects.

There are two types of caries, dry caries and caries carnosa.

The dry caries was studied comprehensively by Volkmann in 1847 and often bears his name. This form is a lesion which determines an extensive destrnction of the bone without a tendency to suppuration. It attacks the epiphysis, especially the upper epiphysis of the humerus, the neck of the femur and the vertebral bodies. Following a rapid spread into the articulations it brings about a dry arthritis but different from the dry form of arthritis deformans; it occurs among young people; the atrophy of the bone in length is extreme.

Caries carnosa was studied first by Koenig in 1885. From its flesh-like appearance it simulates a neoplasm and may be confused with an osteo-sarcoma. The bone is infiltrated at the level of the epiphysis by a soft mass of fungosities made up of very thick connective tissue. One can make out the small tuberculous follicles only by aid of the microscope.

The name spina-ventosa denotes an attenuated form of tuberculosis localized upon a diaphysis, occurring usually in the little long bones of the hand and foot. It is characterized by a new production of bone beneath the periosteum with a rarefaction of the medullary canal; and the bone appears as if blown up and is fragile, though increased in volume.'

In exceptional cases one sees tuberculosis involving the diaphysis of a long bone like the humerus or femur, after having first had a primary focus in the epiphysis. There occurs occasionally an analogous form in its progressive extension and course, in flat bones, as the successive invasion of most of the iliac bone, with a spread into the articulation at the hip.

Acute tuberculous osteitis presents itself under the form of disseminated granulations in the medullary canal. This form is frequently found at autopsy on tuberculous subjects. It may consist in a sub-acute infiltration of an epiphysis.

The periosteum is always invaded by its deep surface. The process invades little by little the osseous tissue, extending towards the external surface of the bone, the periosteum is raised up, detached by the growth of the fungosities and reacts ordinarily very little; only in the entity, spina-ventosa, is there an intense periostitic osteogenesis. When there exists a tuberculous periostitis one must search and one usually finds a sub-jacent caries.

A primary tuberculous chondritis does not exist. Cartilaginous tissue which contains neither blood or lymph vessels can only be invaded secondarily. Most often one easily finds beneath the whitish opaline spots a thinning out of the cartilage, produced by the erosion of the deeper layers by the fungosities coming from the bone. It is very rare that tuberculosis begins in the perichondrium and is only found in the invasion of the laryngeal cartileges.

The lesions of the osseous tissue proper disturb the growth and nutrition of the bone far from the site of the osteitis It is known that the epiphysis of a long bone at the opposite end from that one affected may be deformed, aprophic and that the diaphysis may present islands of fatty and mucous softening scattered through the marrow augmenting the caliber of the canal and in consequence rendering the bone more fragile. The whole segment of the limb corresponding to the diseased bone is atrophied, not only the muscles but the bone.

Sigmoiditis and Infection of the Internal Genital Organs in the Woman.

Jean Poulain says that the position of the sigmoid free in the small pelvis held in position by its mesentery and coming in contact with the female genital organs allows of the propagation of inflammation from one of these organs to the other. This infection is propagated not by the blood-vessels or lymphatics, but by means of the adhesions produced in the peritoneum. These may be many and close enough to cause a paraintestinal tumor as a point of departure for obstruction. The infections of the sigmoid are primarily caused by constipation and are communicated to the genital organs. If treated early they may be cured, while if left alone they cause irreparable lesions of the genital organs. The germs that cause inflammation to pass from the sigmoid to the adnexa are the colon bacillus primarily, the streptococcus, typhoid bacillus, and ameba of dysentery. The one that most frequently passes from the adnexa is the gonococcus. Besides these are streptococci, staphylococci, and tubercle bacilli. We get suppurative and plastic inflammations, the latter producing adhesions that bind down all of the organs contained in the pelvis. In these cases we should try a long course of irrigations of the intestine with hot water and salt, before we undertake operation.—Journal des Sciences Medicales de Lille.

Charlotte Medical Journal

Published Monthly.

EDWARD C. REGISTER, M. D., EDITOR

CHARLOTTE, N. C.

MEDICAL EDUCATION AND COLLEGES.

The recent revolutionary efforts to standardize medical colleges and fix the degrees of medical education, essential and requisite, according to a certain standard, are found to be very impractical and literally failures.

Medical college training is not unique and peculiar, but must be governed by the conditions and the demands of the day and place. The unfortunate report of the strength and weakness of the different colleges, and attempt to grade them along a certain plan, has brought out very distinctly some curious features of education in this country.

One is that the great university colleges with their palatial buildings, endowments, laboratories and salaried teachers, represents one extreme, and the poor cross-road college without any of these appointments, except in a very limited way, is at the other. Both of them fail to give the best medical training. One gives a surfeit of facts and theories and confusing medley of clinical experience and laboratory work that is undigested and unassimilable in any practical way, and is so mixed up with matters that have to be unlearned and put aside for the future, that the student becomes little more than an egotist whose confused learning destroys him.

The poor school gives only a few facts with the personality of the teacher and this often creates a very vivid desire for more, practically sharpening the appetite, rather than surfeiting it. While it is possible that good medical men may come from these two extremes, it is at a great sacrifice.

The real, practical colleges that are doing the work most urgently called for, are those occupying the middle ground between these two extremes. Colleges that are labelled seconds and thirds, according to the scholastic standard of the A. M. A. Counsel.

The farcical comparisons which would place the first colleges on the pinacle and the second and third colleges on a descending scale, indicate a very faulty prospective and failure to realize the necessities and wants of college training.

The great leaders of the profession who are thinkers as well as students realize that the best college work can only be done in small colleges, managed by practical men who are doing daily the work that they are teaching. Laboratory work of necessity must be elementary and research can only be done by post-graduates for special purposes. Great clinical facilities confuse, rather than instruct. The students want instruction in elementary principles and not exhaustive theories or exact methods that by and by must be put aside for some other theories.

The students want the personality of the professors and the inspiration to become students not doctors, but to get an inspiration that will go with them in actual life and make them accurate observers and reasoners.

Colleges must be live kindergarten schools adapted for the students and community in which they live. Medical scholasticism is alright in Europe, but traditional theories and conceptions that have come down from the past fail in this new age and new country. Colleges may be graded, but they must be along practical lines adapted for the students. Palatial buildings and great equipments do not make medical men, they may not furnish the facts so essential in real life in a way they may be used, and with it they may teach mannerisms and egotisms that will be fatal.

Great gatherings of medical students and distinguished medical teachers are not essentials for the best training. Often they are great switch points to send a student on a side path, rather than keep him on the main line. Medical college training is by no means a settled and fixed scheme and plan. It depends largely on the men and the students and while it is wise to insist on a higher grade and standard of education, this should be along practical, workable lines. The student must be trained to take up the work as he finds it and adapt himself to the conditions as they exist. If he cannot do this he fails, and the college fails to give the man the proper facilities to discover and apply the great truths of science in the home of the wealthy as well as that of the very poorest persons.

Evidently much work must be done yet, and many very radical changes from the present must be made, to make the college efficient as a training school. The present efforts will have to be changed and the grading worked over before the real facts can be brought out and made useful.

EDITORIAL NEWS ITEMS.

New Bern, N. C., was chosen as the place for holding the 1912 session of the Seaboard Medical Association of Virginia and North Carolina.

The new officers chosen were as follows: President, N. M. Gibbs, M. D., New Bern, N. C.; vice-president, J. E. Rawles, M. D., Suffolk, Va.; second vice-president, H. W. Carter, M. D., Washington, N. C.; third vice-president, George J. Williams, M. D., Newport News, Va.; fourth vice-president, H. W. Harrison, M. D., Creswell, N. C.; treasurer, Israel Brown, M. D., Norfolk, Va.; secretary, Clarence Porter Jones, M. D , Newport News, Va.; Orator, R. L. Payne, M. D., Norfolk, Va.

The Davidson County Medical Association met in Lexington, N. C., on December 5th, and besides other business attended to, they elected the following officers for the ensuing year:

President, Dr. Charles A. Julian, of Thomasville; vice president, Dr. D. J. Hill, of Lexington; secretary and treasurer, Dr. J. R. Terry, of Lexington. The board of censors will be composed of Drs. C. M. Clodfelter, J. H. Mock and J. E. Cathell. The committee on public health is composed of Drs. E. J. Buchanan, W. L. Hill and Frank L. Mock. Dr. J. W. Peacock was named as delegate to the State Medical Society.

The Cumberland-Hoke Medical Society held its annual meeting, for the election of officers, in Fayetteville, N. C., on December the 12th. The following physicians were elected to office:

President, Dr. J. A. MacKethan; vice-president, Dr. J. M. Lilly; secretary and treasurer, Dr. Wm. S. Jordan; delegate to State Society, Dr. R. B. Hayes; alternate delegate to State Society, Dr. Geo. W. Brown, Raeford; Board of Censors, for three years, Dr. T. M. West; for two years, Dr. J. V. McGougan; for one year, Dr. J. W. McNeill.

The following were elected as members of the society: Dr. R. L. Pittman, Fayetteville; Dr. H. L. Timmons, Fayetteville;Dr. S. S. Hutchinson, Hope Mills.

Book Notices.

Diseases of Infancy and Childhood. Their Dietetic, Hygienic, and Medical Treatment. A Text-Book Designed for Practitioners and Students in Medicine. By Louis Fischer, M. D , Attending Physician to the Willard Parker and Riverside Hospitals of New York City; Attending Pediatrist to the Sydenham Hospital; Former Instructor in Diseases of Children at the New York Post-Graduate.

The author of this volume has divided his work into twelve parts as follows: I. The New-born Infant; II, Abnormalities and Diseases of the Newly-born; III, Feeding in Health and Disease; IV, Disorders Associated with Improper Nutrition, and Diseases of the Mouth, Oesophagus, Stomach, Intestines, and Rectum; V, Diseases of the Heart, Liver, Spleen, Pancreas, Peritoneum, and Genito-Urinary Tract; VI, Diseases of the Respiratory System; VII, The Infectious Diseases; VIII, Diseases of the Blood, Lymph Glands or Nodes, and Ductless Glands; IX, Diseases of the Nervous System; X, Diseases of the Ear, Eye, Skin, and Abnormal Growths; XI, Diseases of the Spine and Joints; XII, Miscellaneous.

The greatest stress has been laid on the diagnosis, symptoms, and treatment which are so necessary at the bedside.

This work seems to be complete in every detail, and thoroughly up to date in every way. The publishers have exhibited their good works in this book and the illustrations are both numerous and extraordinary.

Anaesthesia and Analgesia. By J. D. Mortimer, M.B. (Lond.), F.R.C.S. (Eng.) Anaesthetist Royal Waterloo Hospital; Throat Hospital Golden Square; St. Peter's Hospital for Stone, Etc.; Instructor Medical Graduates' College. London: University of London Press. Published for the University of London Press, Ltd. By Hadder & Staughton and Henry Frowde.

While there are already many books in circulation referring to this subject, we don't believe there are many that are more concise, and of more real value to the every-day practitioner than this one will be found to be.

The binding and illustrations of this book show that no care has been spared in its preparation. It is with pleasure that we recommend this book to our patrons.

Minor Surgery. By Leonard A. Birdwell, F.R.C.S., Surgeon to the West London Hospital, Dean of the Post-Graduate College, Consulting Surgeon to the Blackheath and Charlton Hospital and to the City Dispensary, and Author of "Handbook of Intestinal Surgery." With Eighty Eight Illustrations. London: University of London Press. Published for the University of London Press, Ltd. By Hadder & Staughton, aud Henry Frowde.

The author's object in publishing this little book was to give simple and clear directions for the management of every-day surgical work. He does not pretend to give a full and complete treatise upon the subject. The methods set forth in this little volume are for the most part upon Dr. Bridwell's own experiences, and we feel confident that physicians will find this book of great value.

The binding is substantial and shows no lack of care on the part of the publishers.

Manual of Physiology for Students and Practitioners. By H. Willoughby Lyle, M.D., B.S. (Lond.), F.R.C.S. (Eng.), Assistant Ophthalmic Surgeon to King's College Hospital; Ophthalmic Surgeon to the Royal Ear Hospital; Examiner in Physiology for the Primary Fellowship of the Royal College of Surgeons of England; Formerly Lecturer on, and Senior Demonstrator of Physiology in King's College, London. With one Plate and 135 Figures in the Text. London. Henry Frowde, Oxford University Press: Hadder & Straughton, Warwick Square, E. C. 1911.

The author gives in this volume the notes of the lectures, somewhat elaborated, which he has given to the members of his classes at King's College, London, during the last sixteen years. Histology has not been extensively dealt with in this volume but has only been referred to in those cases where it directly bears upon the physiology of the organs under consideration.

This manual is in no way intended to supply the place of a practical text-book, yet it is of great value to medical students.

The book is well bound, and its make-up is quite attractive.

Diseases of the Stomach. With Special Reference to Treatment. By Charles D. Aaron, Sc.D., M.D., Professor of Gastroenterology and Adjunct Professor of Dietetics in the Detroit College of Medicine; Professor of Diseases of the Stomach and Intestines in the Detroit Post-Graduate School of Medicine; Consulting Gastroenterologist to Harper Hospital. With 42 Illustrations and 21 Plates. Lea & Febiger, Publishers, Philadelphia and New York. 1911.

In this work the author has endeavored to cover the medical aspects of gastric disorders in such manner as to answer the actual needs of the practitioner.

In addition to the chapter on Medication, due attention has been given to the use of Aystilytic Serum and Bacterial Vaccines. Care has been exercised to reflect the latest progress in this rapidly advancing department. The chapter on Examination of the Stomach Contents includes those tests which, in the author's opinion, will best assist the practitioner in diagnosis and treatment. With regard to surgical treatment no more has been attempted than to give the indications.

The publishers of this volume have not fallen short of their high standard in this particular work, and the book is in every way attractively and conveniently arranged.

A Text-Book of Practical Gynecology. For Practitioners and Students. By D. Tod Gilliam, M.D., Emeritus Professor of Gynecology in Starling Ohio Medical College; Gynecologist to St. Anthony and St. Francis Hospitals; Consulting Gynecologist to Park View Sanitarium, Columbus, Ohio; Fellow of the American Association of Obstetricians and Gynecologists; Member of the American Medical Association, of the Ninth International Congress, etc. Fourth Revised Edition. Illustrated with 352 Engravings, a Colored Frontispiece, and 13 Full-page Half-tone Plates. Philadelphia: F. A. Davis Co., Publishers, 1911.

In the preparation of this fourth edition of this work, the author has brought it fully up-to-date as we see it. The most notable additions have been made along the line of Abdominal and Pelvic Lesions Other than Gynecologic, where due consideration has been given to diagnosis and treatment of such affections as the gynecologist must necessarily deal with in his daily work.

This volume is substantially and neatly bound, and the illustrations are much above the ordinary. The price of the book is $5 net.

Diseases of the Ear, Nose and Throat. Medical and Surgical. By Wendell Christopher Phillips, M.D., Professor of Otology, New York Post-Graduate Medical School and Hospital; Surgeon to the Manhattan Eye, Ear and Throat Hospital; Fellow of the American Laryngological, Rhinological and Otological Society; Fellow of the American Academy of Ophthalmology and Otolaryngology; Attending Otologist to the Post-Graduate Hospital and Babies' Wards; President of the Medical Society of the State of New York, etc. Illustrated with 545 Half tone and other text Engravings, many of them original; Including 31 Full-page Plates, some in colors. Philadelphia: F. A. Davis Co., Publishers, 1911.

The book has been prepared to meet the needs of the general practitioner and surgeon as well as the otologist and laryngologist.

In the chapters devoted to general considerations the author has grouped various symptoms and measures of treatment which are common to two or more affections, in order to avoid needless repetition. This section will appeal to the general practitioner and will be valuable for reference.

The subject matter is presented in the general form of a text-book, but in the preparation of the text, as well as the illustrations, the author has aimed to make it a practical, comprehensive operative surgery of the ear, nose and throat.

The binding of this book is like other books published by F. A. Davis Co., neat, attractive and substantial. The illustrations are numerous, and well placed, adding much to the clearness of the text.

International Clinics. A Quarterly of Illustrated and Clinical Lectures and Especially Prepared Original Articles. Volume IV, Twenty first Series, 1911. Philadelphia and London: J. B. Lippincott Co. 1911.

The articles in this volume deal with the following subjects: Treatment, Medicine, Surgery, Neurology, Paediatricts, Obstetrics, Gynaecology, Orthopaedics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Laryngology, Hygiene, and other topics of interest to students and practitioners.

These articles are all of great value to the medical profession, the last volume of the twenty-first series being on an equal with the former volumes of this series.

The binding and general make-up of the book is good, and quite attractive.

Beginning with the January, 1912, issue of the Medical Review of Reviews, we notice that they have inaugurated or established a new idea in medical journalism. They have broken away from the routine that they have followed for years.

This journal has absorbed Therapeutic Medicine, and everything points to a very succesful future for this journal.

Abstracts of the Leading articles of the month.

Surgical Treatment of General Peritonitis.—Dr. C. C. Childe, of Portsmouth, England, thus described his methods to the British Medical Association:

1. Position.—When a patient is admitted to hospital suffering from any acute abdominal affection, my instructions are that he always be placed at once in the Fowler position. If operated upon he is carried to the theater, operated upon, and returned to the ward in this position, which is retained till all danger is past.

2. Clothing.—The patient is clad from head to foot in a cotton-wool jacket.

3. Operation.—The skin disinfection with iodine obviates unnecessary exposure, washing, shaving, etc. It saves time, which is of the utmost importance. The operation consists in the removal of the infecting focus with the least possible delay. If the case is quite early—for example, a perforated gastric ulcer or appendix operated upon within, say, six hours, the abdomen may frevuently be closed throughout; but it is difficult to be sure when this can safely be done, and far the majority of cases are drained with rubber tubes. Probably in a much larger percentage than actually occurs, it would be safe to close the abdomen and leave the peritoneum to deal with the remaining infection, but the surgeon not having the requisite courage which comes of definite knowledge on this point adopts the safer course. I have practically abandoned all washing out of the peritoneal cavity. Discharges, wherever seen, are gently sponged away with gauze swabs, wrung out warm in saline solution. Moist swabs are, in my opinion, better than dry, for the reason that they inflict less injury on the delicate inflamed peritoneum. Drainage tubes surrounded with gauze are placed in position whence most of the discharge flows. The tubes are for drainage, the surrounding gauze not for drainage, but for shutting off the space. In the later cases of perforated gastric ulcer the pelvis is always drained by a large rubber tube brought out above the pubes. I have seen an omission of this precaution followed by a large pelvic abscess. Secondary abscesses sometimes form, owing, no doubt, to pockets of infection which have escaped drainage, and which Nature's defensive processes have been unable to deal with; but these secondary abscesses are always localized and are rarely dangerous to life. The removal of the infecting focus, if done in time, seems always to cut short the disease. If secondary abscesses form, after a few days, in a case which has been doing well, the temperature will begin to rise and will maintain an irregular type, but the patient will be evidently not very ill. I am not in a great hurry to open these abscesses, for two reasons. First of all, in many cases in a few days they will discharge themselves through one of the openings already present. If they do not do so, by waiting a little while the most convenient route for opening them can generally be determined. Far the majority of them form in the pelvis, owing to the gravitation of infective matter toward the lower abdomen in all of these cases, and in women they can be usually opened through Douglas's space. When this is accomplished a large drainage tube is inserted into the cavity, fixed with a cat-

gut stitch to the cervix, and cut off flush with the vaginal orifice. Through this the cavity is irrigated out twice daily with sterile water, and when the catgut stitch gives way and the tube comes out, which is usually in about a week, vaginal douching is continued until the abscess has closed.

4. Proctoclysis is employed from the beginning, and is of the greatest service. Twelve to sixteen pints is not an uncommon amount absorbed in the first twenty-four hours, when administered by an experienced nurse, and I quite agree with Murphy that generally, if the fluid is not retained, it is because it is improperly given. If, as occasionally happens, the patient will not retain it, axillary infusion is substituted.

5. Small doses of calomel are administered by the mouth till the bowels have been got to act and flatus to pass.

6. The rectal tube is inserted for ten minutes every four hours. This frequently enables the patient to pass flatus—an all important matter—and further assistance is given in this direction if required by the administration of turpentine enemata at intervals.

7. If vomiting persists, lavage of the stomach in some cases at once and for good arrests it.

8. Care should be taken that there is no tight bandaging. This, in the case of a distended abdomen, is a serious handicap on the patient's breathing capacity, and the loosening of the upper part of the bandage will often bring the greatest relief.—The British Medical Journal.

Lumbar Puncture.—The diagnostic value of lumbar puncture has been firmly established, but its therapeutic value is not so generally known. H. Curschman always punctures with the patient lying on his side instead of sitting up and introduces the needle laterally. For diagnostic purposes, 8 to 10 Cc. should be withdrawn; for therapeutic purposes enough to restore the normal pressure of 120 to 150 Mm. water. Lumbar puncture is indicated in all cases of acute and chronic meningitis, meningismus and non-inflammatory increase of fluid. Really marvelous results are seen in the so-called serous meningitis, no matter whether the fluid is normal or contains more albumen with lymphocytes in the sediment. The condition is analogous to edema in other parts of the body and is often cured by a single puncture. though the patient's condition may appear very alarming. Meningitis due to influenza is often cured by puncture and the same may be said of meningeal inflammation following erysipelas, though streptococcus meningitis secondary to ear trouble is less favorably affected, and the epidemic type of the disease usually also requires the injection of serum. Irrigation of the spinal canal with sublimate solution has been recommended in cerebrospinal syphilis. The results are least satisfactory in tuberculous meningitis, though a few cases have been reported cured. Some brilliant results have been published in internal hemorrhagic pachymeningitis. Lumbar puncture has also been tried in a variety of other affections, such as gastric crises, chorea, epilepsy, tetanus, incontinence of urine, Meniere's disease, itching dermatoses, etc. The author could see no good effects in uremia, probably because the exudation is cortical and parenchymatous. The small operation is usually harmless, yet care is in place, particularly in nervous and hysterical patients. There is only one condition where lumbar puncture is serious and may be followed by sudden death, namely, in tumors of the posterior fossæ. The high pressure will drop suddenly and the patient may become deeply cyanotic and cease to breathe while the heart will continue to beat for some time. The tumor is usually in the cerebellum or in the neighborhood of the aqueduct and the fall of pressuse resulting from lumbar puncture will force it against the foramen magnum or fourth ventricle. In rare cases, there may be a hemorrhage into the tumor.—Therap. d. Gegenwart.

Simultaneous Bilateral Tubal Pregnancies.—Vautrin (La Gynecologie) thinks that conception with the ovum in the tube instead of the uterus is quite a common occurrence, and that in most cases the ovum passes on into the uterus; when it does not do so it is either absorbed after death due to lack of proper circulation and nutrition, or causes a tubal abortion, which before three months is characterized by a few abdominal pains and a moderate intermenstrual flow. The ovum remains permanently fixed in the tube by an unusual combination of circumstances. The cause we do not know, since inflammation and alterations of the tubal walls do not seem to play an importanf part in causation. Pregnancy may develop in both tubes at about the same time, and here we are not justified in sterilizing the patient because she is so unfortunate as to have a first abnormal conception. After four months the tubal pregnancy exposes to greater dangers, to hematocele, which may become infected. A non-infected hematocele may be allowed to remain, in hope of absorption. An infected one demands posterior colpotomy and drainage. Infection of the tube may cause salpingo-oophoritis, displacements and sclerosis. After the removal of the ovum by tubal abortion the envelopes may become encysted in the tube by closure of its extremities and become a hard tumor. When the ovum is retained laparotomy may be necessary and then hysterectomy is justifiable. But when there is a double infected hematocele one need not necessarily do a laparotomy, but should give the patient the benefit of a colpotomy, with a possible later normal pregnancy.

Duodenal Ulcer.—Mathieu and Æltinger (La Quinzaine Therapeutique) point out that the ulcer described by English and American surgeons as duodenal ulcer is better described as an ulcer of the pylorus or as a duodenopylorie ulcer; the symptoms are those of pyloric ulcer—pyloric spasm and hypersecretion. The clinical study of four cases of true duodenal ulcer, that is to say, an ulcer situated at a distance of one, two, or three centimetres from the pylorus, recognized and diagnosticated by M. Æltinger, gave him an opportunity of learning their symptomatology. Except in absolutely latent ulcers or in perforating ones haemorrhage is not present. The pains are intermittent, sometimes continuing for days or weeks with intervals of freedom from suffering; they come on slowly some five or six hours after food, and usually at night. They occur in the epigastrium, and are better marked on the right side, in the suprapubic region, which is painful on palpation, and they radiate along the right side from the iliac region to the diaphragm. Vomiting is seldom present, but when it does occur it consists of a little gastric juice. Intestinal haemorrhage is not constant—it occurred in but one of the four cases; it occurs less frequently than in ulcer of the stomach, probably because duodenal ulcers are directly in the path of the undigested food; they are less in contact with the alimentary substances. Exploration of the stomach showed neither hypersecretion nor arrest of the digestive process, but an excess of hydrochloric acid. A skiagraph showed the undistended stomach, the relative rarity of peristaltic contractions and the pylorus to be situated at the right side of the third lumbar vertebra. The fourth case was one on which Ricard and Labey had performed a gastro-enterostomy, after which all the symptoms disappeared, and the patient remains well. Mathieu's case was that of a true ulcer of the duodenum. The patient, a man of thirty-one years of age, who had suffered much from severe dyspepsia for three years, came complaining of a sharp persistent pain of two months' duration, situated under the liver, with paroxysmal attacks of great intensity three or four hours after mid-day. A gastro-enterostomy was performed by Labey, when a simple clinical examination and a radioscopic one were made and a duodenal ulcer was found situated at the beginning of the middle third of the duodenum. In this case Mathieu draws attention to the clearly marked symptoms: the pain gradually relieved by the ingestion of food; their intensity in and their radiation from the right during the paroxysm of pain; the localization of the pain and its provocation by palpation a little below the gastric region; the presence of slight malaria; the absence of vomiting, of dilatation of the stomach, of visible peristaltic movements, constant as found by direct and by radioscopic examination, finally by means of the radioscopic screen the ulcer was clearly localized at the painful point—the union of the upper and middle part of the duodenum—where it was demonstrated by direct examination after incision of the ventral wall.

Diphtheritic Paralysis.—Love, in The Glasgow Medical Journal, submits to a critical analysis 1313 cases of diphtheria, in 85 of which (6.4 per cent.) diphtheritic paralysis occurred. With regard to treatment, the importance of prophylaxis cannot be overestimated, and this is best secured by rest in bed in the recumbent position for periods varying from three to six or seven weeks. On the occurrence of vomiting, associated with cardiac paralysis, all oral alimentation must be stopped and rectal feeding instituted. Nutrient enemata, consisting of four ounces of milk, which should be peptonized, may be given every four hours. Drugs may be given along with the rectal feeds, and may be necessary. The author has been disappointed with adrenaline, so strongly advocated by Rolleston, and he relies more on strychnine. Both these drugs may be given either per rectum or hypodermically. He does not believe in the use of antitoxin in diphtheritic paralysis with the possible exception of cases in which no antitoxin has been given during the primary attack.

Remarks on a Collunarium or Nasal Lotion.—Glegg, in The London Practitioner, says that a nasal lotion should fulfil certain conditions in its composition. It should be neutral in reaction, free from substances likely to cause irritation, and contain salts in solution in sufficient proportion to avoid causing either swelling or shrinking of the tissues. To avoid abnormal effects on the tissues the lotion is prepared to resemble the tissue fluids; that is, approximately isotonic with the blood plasma. The following prescription is given as an example of a scientifically constructed collunarium: Sodium chloride, 6 drachms; sodium sulphate, 2 drachms; sodium phosphate, 2 drachms; white sugar, to 3 ounces; thymol, 3 grains; menthol, 3 grains; water, to 6 ounces. Dilute two teaspoonfuls with warm water (about 90° F. or 32° C.) to half a tumblerful to make a nasal lotion of the required strength. The sodium sulphate and sodium phosphate being neutral salts, are preferred to sodium bicarbonate and sodium biborate. The addition of white sugar is an advantage, not in isotonic proportion, as so much would be required, but sufficient to disguise the saline taste and to increase the bulk of the ingredients of the lotion, so as to adjust the amount prescribed to the measures in common use. A trace of menthol and thymol makes the lotion more agreeable. Thymol confers a pleasant odor, and menthol leaves a sensation of coolness.

The Importance of Gonococcal Septicaemia.—Figueras (La Pressa Medica) refers to the various affections which may be caused by Neisser's organism. It may also, by means of its toxins, give rise to a general infection, a form of septicaemia. This may be complicated by vegetative or ulcerative endocarditis, nephritis, bronchitis, pleurisy, bronchopneumonia, and arthritis. It is interesting to note that Debore cured a gonococcal arthritis by means of radium after it had resisted all other forms of treatment. The diagnosis of gonococcal septicaemia is not always an easy matter. It is very apt to be confused with typhoid fever. One of the author's own cases had been treated for some time as a case of malaria. This was a case of arthritis and pulmonary oedema with dyspnoea, haemoptysis, a pulse-rate of 140, and a mitral diastolic murmur. The urine was diminished, and contained albumin with epithelial cells and hyaline and granular casts. The case was later complicated by an uraemic seizure. Treatment consisted of injections of antigonococcal serum, theobromine, and Vittel water. The diagnosis was based on examination of the blood, of the urethral pus, and on the Widal reaction, which was negative.

Treatment of TetanEs.—In the Berliner Klinische Wochenschrift appears a report on a large number of cases of tetanus treated by Dr. Bacelli's method of subcutaneous injection of carbolic acid. Of ninety-four cases of severe tetanus collected from medical literature (mostly Italian) only two proved fctal. Of thirty-eight very severe cases, sixteen died. From these latter Dr. Baccelli excludes eleven cases, because the doses administered were wholly insufficient. This reduces the mortality of the latter 18.5 per cent. Considering that the mortality of severe cases of tetanus is 100 per cent., in ordinary circumstances these figures would appear to be highly satisfactory. Dr. Bacelli uses a 2 to 3 per cent. watery solution of carbolic acid, which is injected subcutaneously. He commences with very small doses, but as soon as the proper tolerance of the patient has been established by examination of the urine, the dose should be rapidly increased until the patient takes 1 to 1½ grammes in the course of twenty-four hours. According to the author, tetanus patients tolerate carbolic acid in surprisingly large doses, and he is led to formulate the axiom that the toleration is directly proportionate to the severity of the case.—The Hospital, London.

A New Use for Separated Milk.—It should be a matter of some hygienic importance and for congratulation that a new use for separated milk has been found in England- A patent process is now being employed commercially to make use of this product and to convert it into a hard, tough substance like ivory in texture and color. The new material is said to be readily worked on the lathe and capable of being planed, embossed, or moulded. Fortunately it possesses the great advantage over celluloid and other compositions in being non-inflammable. Some years ago the new composition was in demand for the manufacture of Murphy buttons, since when specially prepared it is digestible. At Prague and at Leipzig such buttons are still used, but they seem to be unknown in this country. The substance seems capable of an extended application, and its use might certainly be encouraged if only for the reason that this development may lead to a decrease in the use of separated milk for the production of certain brands of tinned milk, the pernicious effects of which, when used as a food for infants, are only too well known to the profession.—The Hospital, London.

Thiocol: a Clinical Study.—Cole, in The London Practitioner, gives his experience from a clinical standpoint of 38 cases treated with thiocol. In twenty cases of pulmonary tuberculosis thiocol was employed, and of these fifteen were considerably improved, three were relieved, and two were unrelieved. Thiocol possesses all the food properties of creosote, and is for the most part without tee evil ones. In general it may be said that during, and as a result of, its administration a healing process takes place in the lung tissue, leading to diminution in the frequency of the cough, and in the length of each paroxysm, loosening and lessening the expectoration. The night-sweats always disappear under its use, and rapidly so. The drug is practically odorless and tasteless; it is constant in its composition, and it has never in the author's experience produced dyspepsia. It is nontoxic, and does not depress like creosote. The best dose is 5 grains (0'3 gm.) thrice daily. It can be given in the form of tabellæ or in a mixture. In the latter it may be prescribed with orange or lemon syrup, and it may be prescribed with other drugs. Diarrhœa and a transient rash may occur as complications. Among the other conditions in which it may be used are hospital sore throat, whooping cough, emphysema, chronic bronchitis, and asthma. With the exception of the whooping cough cases, distinct benefit was noted after its exhibition.

A Case of Enlarged Thymus.—According to the Arch. Brasil. de Med., Leitao records a case in a male child, aged ten months, who had suffered since birth from continuous dyspnœa, with occasional attacks of suffocation. On crying or in the recumbent position the neck veins were markedly swollen, being less so when the child was in repose or erect. The stridor was chiefly inspiratory, A smooth, rounded tumor could be felt rising above the manubrium on inspiration, but was hardly perceptible on expiration. On percussion it yielded a triangular area of dullness with the base uppermost, and merging below with the cardiac dullness. Confirmatory evidence of an enlarged thymus was given by the X-rays. Blood pressure was a little above the normal for the child's age: maximum 85 mm., minimum 58 mm. Blood examination: Mononuclears 9'56 per cent., eosinophiles 9'5 per cent., mast-cells 1'9 per cent. Local application of X-rays was made twice weekly, each sitting lasting from 45 seconds to a minute, and in two months the supra-sternal tumor could no longer be felt, the neck veins had completely disappeared, and the thymus dullness and X-ray shadow were normal. The mononuclears had now fallen to 6'2 per cent., the eosinophiles to 3'6 per cent., and the mast-cells to 0'4 per cent. Leitao concludes that X-rays have a most satisfactory action in cases of enlarged thymus, and except in cases of imminent death from suffocation should always be preferred to surgical treatment.

Treatment of Normal Whooping-Cough.—Nobecourt (Paris Med.) describes some of the remedies not usually known for this disease. Weill and Martin found good results from the inhalation of quinoleine, a substance extracted from coal-tar or prepared synthetically. Tea to thirty drops are added to 100 c.cm. of boiling water and inhaled three or four times a day up to twenty minutes. Internally a saturated solution of fluoroform is well spoken of by Tissier. Two gr. of 8 per cent. fluoroform is given three times a day in the following doses: Up to one year, 10 to 15 drops;from one to three years, 15 to 20 drops; over three years, 20 to 30 drops, and in addition after each attack of coughing as many drops as months or years of the child's age: 60 to 80 drops can be given per diem in the newly-born up to 150 to one year and to 20 grm. to children over three. Anti-diphtheritic serum, or 0'10 gr. of antitetanic serum,have also proved efficacious. He devotes the remainder of the article to a consideration of the usually employed remedies and sums up the treatment as follows: Inhalations of water medicated with various substances, as quinoleine, etc., internally, belladonna, quinine, or antipyrin in increasing doses. If the fits of coughing are violent, inhalations of oxygen, chloroform or ether during the attacks, and if very severe, morphia injections or chloral. Hogianic measures are essential.

Cancer of the Prostate.—Dr. Robert C. Bryant, of Richmond, Virginia, at the recent meeting of the Mississippi Valley Medical Association, said that at present there were several tests for cancer which were being tried out and perfected in the laboratory. Some of the more significant were: 1. The hæmolytic tests, which were being investigated particularly by Crile. 2. The miostagmin reaction (Ascoli) consequent upon a diminution of surface tension of solution of the serum of the patient when the extract of carcinoma was added to it. 3. The antitryptic power of the blood. 4. Colloidal nitrogen of the urine. None of these tests was final and absolute, and until they were we could never hope to be able to diagnosticate clinically these precancerous cases. Primary cancer of the prostate might follow one of two general types, namely, the scirrhous and the glandular. Cancer was not infrequently associated with beginning hypertrophy, it might originate in a normal and atrophic gland, or in an organ which had been the seat of a chronic prostatitis. One lobe or the entire gland might be involved. The infiltration might form foci so small as to be detected only by the microscope. Carcinoma of the prostate did not result as a degeneration of a previously benign adenomatous process. In every case of senile prostatic hypertrophy the fact of the possible existence of carcinoma must be constantly borne in mind. The prostate itself caused no symptoms in the early stages of carcinoma. The subjective symptoms were given out by the bladder and pelvic organs, the invasion of the disease was so gradual, and the symptoms modified so progressively, that there was an unconscious adjustment of the patient to the condition. The treatment was divided into preventive and curative. Medical treatment was not to be entertained. There would seem to be also but little virtue in the x ray, Finsen, or radium therapy, The author quoted Kummell as maintaining that bilateral castration was the operation of choice. In twenty two cases of twenty-six operated in, the prostate was removed and the patients regained the bladder functions. The suprapubic operation was to be condemned, as the prostatic urethra came away and gave an unusually gocd opportunity for the escape of carcinomatous juices. In the second stage of carcinoma of the prostate the operator exercised his judgment for surgical attack upon the degree and type of pathological invasion.

Haemochromatosis.—Three cases of this rare disease are reported by Sprunt (Arch. Int. Med.). One was simple hæmochromatosis, complicated by tuberculous peritonitis; the two others were quite typical of ihe more frequently described form known as bronzed diabetes. The disease is rare, there being records of only about fifty cases with, and thirteen without, diabetes. All authentic cases have occurred in males. In diabete bronze we have the clinical picture of severe diabetes, generalized pigmentatfon of the skin but not of the mucous membranes, and an enlarged, often tender, liver. The discoloration of skin varies from icteric, light sunburn, to earth color, lead color, and even bluish black. It is most marked on the exposed parts—nipples, genitals, and axillæ. Pigmentation of the buccal mucous membrane is very rare, in contradistinction to what obtains in Addison's disease The diabetes is severe and rapidly fatal. Pathologically the non-diabetic cannot be distinguished from diabetic cases, and it is now held that simple hæmochromatosis is merely an earlier or less severe form of the disease. Those who assume that the diabetes is due to changes in the liver or pancreas hold that in simple hæmochromatosis the lesion in these organs has not advanced sufficiently to disturb carbohydrate metabolism; others, who believe that the three cardinal symptoms, pigmentation, cirrhosis of the liver, and diabetes are independent of one another, and due to the same cause, give no explanation of these cases, except that they are less severe forms. In all three of Sprunt's cases the onset was rather abrupt, and the pigmentation became progressively more intense. The chief pathological appearances are—ochre or bronze color of many glandular organs, the heart muscle, and lymphatic glands; enlargement and cirrhosis of the liver; and changes in the pancreas—atsophy or enlargement. The pigment is hæmosiderin (an iron pigment reacting to ammonium sulphide, etc.) and hæmofuscin (an iron pigment which does not react to ordinary reagents). The former predominates; its characteristic sites are the parenchyma cells, and only after these have disintegrated is it found in the connective tissue. The liver contains enormous quantities of iron in this disease—7 per cent., as compared with 2 per cent. in pernicious anæmia, and .08 per cent. normallo—at least ten times as much as that in the whole body of the average human being. Hæmofuscin varies greatly in different cases, being in some scarcely appreciable. It is found characteristically in the connective tissue cells. Increase in the fibrous tissue is found in those organs, notably liver and pancreas, in which great numbers of the cells have degenerated and deposited pigment in the interstitial spaces. A number of the different theories of the pathogenesis of haemochromatosis which have been from time to time put forward are discussed by Sprunt. At first the diabetes was looked on as primary. Von Recklinghausen, in 1889, described general haemochromatosis as a change which might occur in the course of different diseases, of which diabetes was one; Buss, in 1894, took up the position that the pigmentation, caused by some primary blood disease, brought about the pancreatic lesion and led to diabetes; Marie regarded it as more nearly allied to the pancreatic than to any other form of diabetes. In 1899 Anschutz supported the view that the primary event was blood destruction from some unknown cause, and Opie took up a similar position. Murri, and moet recent German writers, think that the three cardinal features of the disease are independent of one another and due to the same cause, possibly alcohol. Another theory blames defective elimination of iron, not excessive blood destruction, for the pigmentation. This theory assumes various forms. According to Croftan a ferment exists in the liver which can break up haemoglobin in the presence of sugar. It is then supposed that under some toxic influence the pancreas and liver become cirrhosed; hyperglycaemia results, and in the presence of the excess of sugar haemoglobin is transformed into haemochromatin, which the cirrhotic cannot eliminate. A less elaborate theory is that of Melzer, viz., that through some fault in the mechanism of iron metabolism the organs and cells retain all or most of the iron which reaches them on its normal round through the body. Sprunt apparently inclines rather to the faulty elimination than to the blood destruction theory of origin. He certainly makes a strong point when he shows that there is no clinical evidence of abnormal blood destruction or of reparatory activity of the haemoporetic organs. He lays stress on the fact that in many chemical reactions iron is a potent catalytic agent, and furthers oxidation; he suggests that the normal tissue iron has this function. He is not disposed to accept unreservedly the obvious notion that the diabetes in these cases is due to pancreatic disease, but connects it with the faulty iron metabolism. His position may be summarized thus: Haemochromatosis is a disease characterized by a widespread deposit of an iron containing pigment, especially in secretory cells, by the presence in certain situations of an iron-free abnormal pigment, and by an increase of physiological pigmentation. It is a metabolic disease, manifested by a change in the chromogenic groups of the proteid molecule, with the deposit of pigments. This pigmentary degeneration causes fibrosis of various organs. Diabetes may be caused by diminished oxidation due to the faulty iron metabolism, assuming that the iron compounds of the tissues are catalytic agents.—Edinburgh Medical Journal.

Auto-Sero-Therapy in Pleurisy.—In simple or tuberculous pleurisy, N. Tschigajeff removes 2 to 4 Cc. of the pleural exudate and injects it subcutaneously. This subcutaneous injection of the patient's own exudate is absolutely harmless and is not followed by local or general reaction or rise of temperature above a few tenths of a degree. The temperature induced by the pleurisy itself willl usually fall rapidly. In tuberculous pleurisy, the exudate will usually be absorbed but the process itself is not affected. In the majority of cases of recent sero-fibrinous pleurisy, absorption begins at once after the injection and a cure results in two or three weeks. The cure is more rapid if treatment is begun early, but will also progress with the more chronic forms. Subjective improvement is very pronounced and the flow of urine is usually stimulated. At first there will be a loss of body-weight; later, during convalescence, the patient will again increase in weight. Auto-sero-therapy may therefore be regarded as specific treatment for all pleurisies, though the way it acts is not known.—Rlin.-therap. Woch.

Corneal Opacity Due to Lead.—An ingenious and novel treatment for the dense white corneal opacity which follows the treatment of ulceration of the cornea by lead salts is recorded in the Ophthalmoscope by Major Elliott. The patient, a Hindu woman, had treated herself for an inflamed eye with three successive applications of sugar of lead dissolved in rose water. The inflammation duly subsided, but a dense white plaque remained on the cornea, for which she wanted relief on æsthetic grounds. The author scraped the ulcer freely, but without materially affecting the opacity. He then irrigated the eye with a weak aqueous solution of sulphuretted hydrogen, when the white patch at once turned brown. Although the cornea remained just as opaque as before, the opacity was now no longer obvious to every beholder, though still quite evident on close examination. The patient was so satisfied with this result that she declined all further treatment and has not since been seen. Major Elliott is not aware that anyone has forestalled this resourceful utilization of the elementary chemistry learned in the early stages of the medical curriculum, but thinks it possible that it is so. At any rate, the dodge is one worth remembering, though it might not be so successful.—The Hospital, London.

Alcohol For Hand Disinfection.—Tchumburg, in the Deutsche Medizinische Wochenschrift, says that washing the hands with strong alcohol is a most effective means of removing all infection and rendering any bacteria innocuous. He says that 200 c.cm. of alcohol applied with a pledge of cotton-wool are sufficient to disinfect the hands to the extent of 99 per cent. or more of all bacteria present. Ordinary methylated spirit is quite effective. From experiments in the medical department of the Prussian Ministry of War it appears that washing with soap and water combined with even prolonged scrubbing with a brush does not remove the microbes, the soap softening the skin and making the bacteria more adherent. Alcohol, on the other hand, by hardening the skin, causes the bacteria to become rapidly detached. To secure proper disinfection with alcohol the preliminary use of soap and water must be dispensed with, the reasons given being that the residual moisture, even after drying, dilutes the alcohol, and further that the softening of the skin by water causes it to contract too strongly when the alcohol is applied, and by rendering it rough and scaly encourages the transference of bacteria from the surgeon's hands to the wound. Inasmuch, however, as the wearing of gloves for operations has been now so generally adopted, disinfection of the hands has not the same importance that it once possessed for the success of aseptic surgery.

Iodine Sterilization.—Leedham-Green (British Medical Journal) says:

I was now wishful to learn how the iodine preparations compared with the mercury ones. For the purpose of comparison I selected, as the result of early experiments, an alcoholic solution of mercury perchloride (1 in 1,000 of 70 per cent. spirit) as representing the most powerful mercury preparation suitable for clinical use, and tested it side by side with the 70 per cent. tincture of iodine, the officinal tincture of iodine and 1 in 1,000 aqueous solution of mercury perchloride. The result was that the 70 per cent. sublimate alcohol proved superior in bactericidal power to the 70 per cent. tincture of iodine, and still more to the officinal tincture. The aqueous solution of sublimate was hopelessly outclassed, never sterilizing the test object within the half hour. Taking the average of a large number of tests with different non-spore-bearing septic micro-organisms:

Sublimate spirit (70 per cent. alcohol) sterilieed in two and one half minutes.

Tincture of iodine (70 per cent. alcohol) sterilized in seven minutes.

Tincture of iodine (officinal) sterilized in ten and one-half minutes.

Aqueous solution of sublimate sterilized never under thirty minutes.

On several occasions both the iodine and the sublimate alcohol were compared with plain alcohol of a like strength.

The result of these tests, briefly stated, was as follows:

The simple spirit proved to be decidedly inferior to the iodine and sublimate alcohol. These two clearly showed themselves to be powerful skin disinfectants. A true sterility of the skin was, of course, never obtained, but both methods always greatly reduced the infectivity of the area, even when it had been previously grossly contaminated. When both skin and silk thread were dry, the result was distinctly good, the majority of the tubes remaining sterile. But when the thread was wet, and still more when the skin was tested after being moistened with sterile saline or albuminous fluids, the results were disappointing. In an unpleasant proportion of cases the skin proved to be still surgically infective, and this was so when it had not been previously artificially infected. Neither of the two methods can be said to guarantee sterility, and the skin, which had proved to be practically sterile directly after the process of disinfection, gradually became more and more infective as, under the influence of fluid, the hardened epithelium became loosened.

Up to the present (for the experiments are still going on) sublimate alcohol has given the better results. There was a slight superiority even when it was merely painted on the skin like the iodine; when it was freely rubbed on, as in the usual method of alcohol disinfection, the superiority was more marked and at times pronounced.

The Technique And Indications of Breast-Feeding.—Weiss (Mediz. Klinik) Contributes a paper on breast-feeding. The data upon which the Dr.'s study is based are derived from the working classes of Vienna. The writer concludes from his statistical investigation that, while the habit of breast-feeding is still prevalent among the population in question, there is a deplorable tendency to shorten the period during which this feeding is carried out. Thus, among 300 women who had been nursing their infants, 75 were studied with the object of determining the duration of breast-feeding. Of these women, 21.3% nursed for the first time, the baby being the first child. With 2.6% the period of nursing was of the same length as that which the previous child had been subjected to. In a third group only 54.6%, the last child was nursed for a longer period on the average than the previous children. In this last group, the influence of the social work of the "nursing center" was demonstrated. Finally, 18.6% of the women under scrutiny were nursing the last child for a shorter period than their previous children. Another group of women nursed their infants up to the third month in 11.2% of cases; up to the sixth month in 34.3% of cases, up to nine months in 29.5% of cases, and over nine months in 20.9%. The modern viewpoint that almost every mother can nurse her infant if she really tries earnestly and goes about it in the right way should be the guiding principle in all the movements for the promotion of breast-feeding. The fact that even starvation does not necessarily prevent a woman from nursing at least for a time has been demonstrated at the siege of Paris and also more recently at the earthquake in Messina. Poor nutrition is not an insuperable obstacle, and social conditions are not of any practical importance so far as breast-feeding is concerned. Naturally, however, good feeding for the mother is a great help in nursing. The diet should be regulated according to individual preferences and not planned out according to a rigid scheme. The only point of importance is to forbid absolutely the use of alcoholic liquors. The mother should get plenty of sleep, and for this purpose the night feeding should be properly regulated. Much has been said about the influence of the mind upon the secretion of milk. There are some very striking phenomena in this connection; thus, the spirit of rivalry among a number of nursing women will often be effective in producing a greatly increased milk supply. This has been noted in maternity wards, etc., and is not altogether due to the treatment or diet.

Blood Changes in Workers with Roentgen Rays.—Jagic, Schwarz and Liebenrock (Berl. Klin. Woch.) have examined the blood of a number of "Roentgenologen," and others exposed more or less in their work to small but frequent doses of Roentgen rays over long periods of time, and set forth their results. They were led to this investigation by the fact that one of them (Schwarz) had observed a case of leukaemia in a chemist whose business exposed him for a lengthened period to radium emanations. Other cases of death from leukaemia of workers with Roentgen rays have occurred; also, experiments on animals have shown that exposure to Roentgen rays may cause changes in the blood in normal individuals. It is clear, remark the authors, that the protective measures employed by workers in Roentgen ray laboratories are not completely effectual. They are exposed to a small proportion of the primary rays which filter through the interposed media, and also to the secondary rays which permeate the whole room in which the work is carried on to such an extent that a fluorescent screen, although not exposed to any direct or primary rays, is still to some extent excited to action. Altogether, the results of the examination of the blood in ten individuals are given in detail. Most of the cases were men who had worked for years with Roentgen rays, always, except in the earliest years, with protective apparatus; most of them were apparently in normal health, or complained only of slight general weakness. There was, in all the cases, a slight but definite diminution in the total number of leucocytes in the blood. The number was either below the normal or near the lower limit of normal variation. The diminution was chiefly in those leucocytes which originate in the bone marrow—that is, the neutrophile polymorphonuclear leucocytes. It was a striking fact that the acidophile leucocytes were in some cases altogether absent. On the other hand, the lymphocytes were in every case increased in absolute number, in one case to as many as 3,300 per c.mm. In the number of large mononuclear leucocytes no regular alteration was to be made out; the same was true of the red blood cells. It is to be remarked that a relation between the amount of the exposure to the rays and the degree of blood change was apparent to the extent that the case in which the exposure was greatest showed the most marked changes.

Medical Treatment of School Children.

Treatment is the end and aim of medical inspection. the whole procedure would be elaborate trifling, and almost ridiculous, unless it lead to treatment.

Treatment of school children involves two ideas: (1) The hygienic treatment of school children in the mass, in the light of the knowledge and experience of hygienic questions as illustrated in school life. Such knowledge and experience may be expected to come from the mass observations and statistics of numerous school medical officers. (2) The particular treatment of individual ailing children. Data for the hygienic treatment of school children in the mass is already beginning to accumulate and bear fruit, as witness the clearer ideas of ringworm, pediculosis, etc., which are beginning to appear, to say nothing of the questions of ventilation, cleanliness of school buildings, provision of lavatories, etcr, which did not begin with the school medical officer, though they sadly need him for their complete realization. But it is the treatment of particular ailing children which we commonly at once think of when treatment of school children is mentioned.

Some have talked as though every child would now be thoroughly examined with the microscopic eye of a life assurance doctor, and the incipient stages of disease, even such as were entirely unsuspected by the parents, in future would be detected and prevented from developing. Such an idea is quite utopian. Even if it could be caeried out with ideal thoroughness, would not it probably fail to result in the discovery of any number of incipient cases sufficient to make it worth while when the extra cost is considered? Suppose we doubled or trebled our staff, and gave each child a life assurance examination, I doubt whether we should find one per cent. of remediable cases over and above the numbers we find now. But at any rate the ideal of an absolutely complete searching medical examination is out of the question in the average seven to eight minutes' examination of each child allowed us.

Illnesses discovered at medical inspection are limited to a few conditions which do not immediately disable the child. All the other illnesses to which childhood is heir escape the view of the school medical inspector. The greater number of them incapacitate at once, or so early that they generally do not come to the knowledge of the school inspector at all; the children are to be found at home. The prevalent diseases which do come to our knowledge may be enumerated thus: (1) Pediculosis, with which may be grouped ringworm; (2) adenoid obstruction, with deafness and ear discharges; (3) teeth; (4) defects, mainly optical, of the eye; (5) a few orthopedic troubles, with which may be associated hernias and cleft palate; (6) stammering, etc.; (7) a few cases of educational difficulty, such as word blindness; (8) all but the very worst grades of mental deficiency and imbecility; (9) various grades of debility, either inherent or due to slow convalescence. It will be noted at once how heterogeneous these things are, and how remote several of them are from the daily experience of the ordinary general practitioner or family doctor; they are specialists' work. —The British Medical Journal.

Oxypathy and Uric Acid.—Stoeltzner (British Medical Journal) says that lithaemic conditions are most easily produced by a diet poor in fixed alkalis and rich in incombustible acids, and are to be cured by changing the diet and making it rich in fixed alkalis and poor in incombustible acids. It is usual to treat lithaemic patients by making them drink alkaline waters, and this treatment is generally regarded as suitable. Into the further arguments in favor of the suggestion that lithaemia is a form of oxypathy I cannot go today that would carry us too far; as to the details I must refer you to my book itself. Today I shall only ask the question how far the explanation of these diseases as due to oxypathy may have been of any value.

An author in the Lancet says there is little that is new in oxypathy apart from the name. I cannot help thinking that a little exaggerated. Oxypathy tries to give a satisfactory explanation of clinical facts and therapeutic experiences, of the recurrence of lithaemia in families and its tendency to be hereditary, of the injuriousness of unsuitable food and of the success of the approved dietetic and pharmacological treatment.

My view that the unsatisfactory development of so many infants fed on cow's milk is caused by a chronic alimentary poisoning by phosphoric acid has been remarkably confirmed by an interesting publication of Dr. Lade, who has demonstrated that the urine of infants fed on cow's milk contains more phosphoric acid and has a corresponding higher acidity than the urine of breast fed infants. Further, I have had occasion to treat with large doses of citrate of soda some cases of severe migraine and of inveterate neuralgia in gouty adult patients, with entirely satisfactory results; the patients felt better than they had done for years, and were perfectly convinced that citrate of soda had done them more good than any previous treatment.

I am now coming to a matter which I shall discuss today for the first time—the relation between oxypathy and uric acid. I think that uric acid is only to be regarded as a factor in those conditions which are connected with the specific gouty disturbance of the metabolism of purin bodies. The two characteristic points are: First, that the blood contains a demonstrable amount of uric acid even under conditions where it is normally almost perfectly free from uric acid; secondly, that there is a slow and imperfect excretion of uric acid after addition of purin bodies to the food.

Concerning the relation between oxypathy and uric acid, we see that the gouty disturbances of the metabolism of purin bodies are by no means a regular accompaniment or consequence of oxypathy; on the contrary, in the great majority of oxypathic conditions the gouty disturbance of metabolism is absent. That is especially true in early infancy; in infancy oxypathic conditions are extremely frequent, though the food is, as a rule, very poor in purin bodies and even almost free from them; we have no reason to suppose that the metabolism of purin bodies in these infants is disturbed; gout is as rare in infants as oxypathy is common.

General Oedema Following Gastro-Enteritis in Children.—Hume (Brit. Med. Jour.) says œdema developing in early childhood is sufficiently uncommon to render its occurrence a matter of interest, especially as its etiology is very obscure at this time of life.

My attention was turned to a group of cases of general œdema following gastro-enteritis in 1908, when I had four cases under my care in the children's ward of the Royal Victoria Infirmary at the same time. I could not find any evidence of heart or kidney disease in any of these. I utilized this opportunity to carry out some observations on the condition of the blood, the urine, and the effects of treatment.

The age, history, and clinical condition of the 13 cases are so similar that they justify inclusion in the same category. It will be most convenient to give fully the history of one case which was examined in detail, and to tabulate the results of the clinical condition and the treatment in the remaining cases.

R. E., aged two years, was admitted to the Royal Victoria Infirmary on October 12th, 1908. The mother told the sister of the ward that the child had been ill with diarrhea and vomiting in September (four to five weeks before admission); that the child never seemed to pick up after this gastro-intestinal upset, and that a fortnight after the cessation of the diarrhea and vomiting she noticed the appearance of œdema in the hands and face. She also told the sister that while the œdema was forming she thought that the child had passed less urine.

The child was drowsy. There was marked cyanosis of the face, hands and feet, which were also very cold; there was œdema of the eyelids, face, hands, arms, legs, feet and sacral region. On examination of the patient no abnormality could be detected in the heart; the lungs were clear, and there was no temperature, On examination of the urine neither tube casts nor albumen were found.

In blood drawn from the ear there were 3,500,000 red blood cells per cubic millimetre and 60 per cent. of hæmoglobin.

I examined the coagulability of the blood on October 15th, and the coagulation time was similar to that of two other children in the ward, and of two clinical clerks tested at the same time. From the day of admission up to October 19th neither the sister, house physician nor I could feel a pulse in the radial artery. On October 19th I injected five minims of a 1 in 1,000 solution of adrenalin chloride, and in a few minutes the pulse was quite easily felt in both radial arteries, and later the hands became red and warm.

Five minims of a 1 in 1,000 solution of adrenalin chloride were administered hypodermically twice a day up to October 26th. By that time the child appeared perfectly well. The hæmoglobin percentage had risen to 90, and the red blood cells numbered 6,000,000 to the cubic millimetre.

The child left the hospital on October 28th cured, and since that date I have learned that he has had no similar attack.

I will now briefly summarize the clinical histories of the other cases, and for convenience I have appended a table; after which I will describe the pathological findings in two cases, and finally I will briefly discuss the causation of this variety of œdema.

Age.—The ages ranged from 13 months to four years.

Previous History.—In all cases, except nine and ten, there was an antecedent history of diarrhea and vomiting. In cases nine and ten, there had been attacks of measles four and three months previously. The mother was questioned in each case on the subject of the diet of her child, but there were no common factors or marked errors in the dietaries to throw any light on the etiology of the condition.

Distribution of the Oedema.—The hands and feet were affected in each case, and in seven cases the œdema was universal.

Cyanosis.—In all cases there was a degree of cyanosis of the extremities of each child, which could be removed by heat and by friction.

Blood Examination.—I have records of the blood examination of eight cases. In all these there was present some degree of secondary anemia. The blood regained slowly the normal percentages of red blood cells and hæmoglobin some time after the other abnormal features

The Blood-Pressure in Anesthesia.—Guy, Goodall and Reid (Edinburgh Medical Journal) say:

1. In all cases, immediately before the administration of anesthesia, the blood-pressure was found to be above normal and the pulse-rate was increased. This is accounted for by excitement stimulating the cardiomotor and vasomotor centers.

2. The blood-pressure rises considerably when gas is administered with valves. This is due to asphyxia, and the rise is not so marked when rebreathing is allowed. It is almost entirely eliminated when a gallon of oxygen is inhaled previously, but the period of available anesthesia is curtailed by a few seconds.

3. Nitrous oxide followed by ether causes a steady rise of pressure, due to constriction of vessels.

4. Ethyl chloride causes considerable disturbance of the circulation, and in large doses may bring about a dangerous fall of systolic blood-pressure. The pulse-rate tends to fall, but usually remains more rapid than normal.

5. If nitrous oxide be inhaled during five respirations before the ethyl chloride is administered, the blood-pressure rises.

6. The explanation of these facts is not simple. The vagus center may be stimulated by ethyl chloride causing cardiac inhibition, but the continued rapidity of the pulse in most cases presents a difficulty in accepting this view. On the other hand, if the fall of pressure be due to weakening of the heart muscle or ganglia, it is difficult to understand why the pressure should rise when the ethyl chloride is preceded by nitrous oxide.

7. The inhalation of a gallon of oxygen before the administration of gas and ethyl chloride greatly diminishes the pressor effect of gas and ethyl chloride alone, and this suggests that the pressor effect may be due, in part at least, to asphyxia.

Obstetric Comparisons.—Marks (Australasian Med. Gaz.) makes a few comparisons between obstetric practice in the Lady Bowen Hospital, Brisbane, and in the Rotunda, Dublin. Of course the total number of patients was very different in the two institutions, there being 2369 admissions (with 2045 deliveries) in the case of the Rotunda, and only 520 (with 423 deliveries) in the Lady Bowen; the comparisons, therefore, are less valuable than they might otherwise have been. First, in relation to puerperal morbidity: if the British Medical Association method be employed the morbidity in the Lady Bowen appeared to be five times more than in Dublin (as 19 to 3.75); but if the Rotunda method (in which morbidity-temperature and pulse over 99° and 90° for three consecutive takings) be used, it was only double (as 5 to 2.49). The comparison was for the year 1909, and the difference was partly accounted for by the presence of dengue in Brisbane;further, the morbidity was very low in Dublin that year, having been 10.76, 6.67, and 4.33 in the three preceding years. Eclampsia was found to be nine times more common in Brisbane than in Dublin. "Why," asks the writer, "should women living, as they do in this country, a cleaner, healthier, more outdoor life, be more prone to this disease than those living in the slums of such a city as Dublin, the filth, squalor, and poverty of which can only be understood by those who have had experience of them?"

Eclampsia was also more fatal in Queensland than in Ireland, for out of 13 deaths in the Lady Bowen (in three years) the mortality from eclampsia accounted for 9; and the eclampsia mortality rate itself was 27.3 as compared with 11.1 per cent. in the Rotunda. Dr. Marks offers the explanation that perhaps in a semi-tropical climate more work is thrown on the kidneys through an insufficient quantity of fluid being taken to counterbalance the perspiration. He thinks the eclampsia is of a graver type, for the method of treatment employed closely resembled that carried out in the Rotunda.

Deformities of the pelvis were very rare in Brisbane, for no case in three years had occurred requiring more than the use of forceps.

Menstruation After Curettage.—Jaeger (Zentralbl. f. Gynak.) has made a series of investigations into the occurrence of menstruation after the removal of the uterine mucous membrane, and especially after curetting for endometritis and abortion. Comparatively few observations on this subject have been published in recent years, but Jaeger refers to Bondi's and to Englander's papers. Bondi found that after curettage menstruation generally returned at the proper time, and that the type was unaffected; and Englander noted that in nearly 65 per cent. of cases of abortion menstruation returned after four weeks,but in some instances was delayed till five weeks or longer. He gives details of 25 patients who were curetted for endometritis. In 16 of them the curettage produced no effect on the menstrual type, and in four others the period only varied from the normal by a day or two, so that in 20 patients (80 per cent.) the removal of the mucous membrane may be regarded as having no influence on the type. In two cases, however, the period was delayed for a fortnight, and in one case it occurred 14 days too soon; in the remaining two cases the next period was intermitted altogether or came on after three weeks. It has been found that the mucous membrane is very quickly regenerated after curetting, and it is not thought that the state of the mucosa will furnish an explanation of the deviations from the normal noted in this series of cases. The ovary with its secretion is the dominating organ, the uterus playing the part of an "executive"; variations from the normal menstrual type are therefore to be referred to disturbances in the secretory action of the ovary rather than to the state of the uterine mucosa. This conclusion is supported by the fact that in one case menstruation came on two days after curetting, in two cases five days after, and in four cases ten days after the operation; the period was due in these instances, and it arrived notwithstanding the recent removal of the mucous membrane. In a second series of 25 patients curettage was performed for abortion. In them it was noted that the regularity of the return of menstruation was not so marked: in 14 cases it occurred between 21 and 28 days after the curetting, in 7 cases between 29 and 35 days, in one case in 6 weeks, in one in 7 weeks, and twice it appeared in two weeks. It was shown that the duration and degree of the hæmorrhage at the time of the abortion and the age of the pregnancy when the latter occurred had no effect on the return of menstruation. Attention is drawn to the fact shown by Polano that the uterine mucosa is more quickly regenerated after a curettage for abortion than after the spontaneous expulsion of the uterine contents. The conclusion is reached that the return of the menses after abortion depends, not upon the regeneration of the mucosa nor upon the involution of the uterus, but upon the antagonistic variations in the relations between the function of the ovary and that of the placenta. Only when the inhibitory influence of the placenta upon menstruation has been fully removed can that process be re-established, and this accounts for the delay in the return of the menses after curettage for abortion as compared with its swift return after an ordinary scraping for endometritis.

Injuries of the Abdomen.—Richard V. Hippel (Zeit. fur Versich.) continues his consideration of this subject. He says that the stereotyped description of dullness in the right flank as due to injuries of the liver and of that in the left flank as due to injuries of the spleen is not at all applicable to all cases. The dullness due to the blood effusion may be found anywhere, according to the various positions of the body assumed after injury. Liver dullness at first is unchanged; soon after injury it may be increased because of the collection of blood near the liver, later it may diminish because of the developing meteorism or dislocation of the liver itself. With the development of peritonitis liver dullness progressively diminishes. The same signs may accompany injuries of the spleen. Fortunately, however, it is not important to decide which organ is the seat of injury and hemorrhage, for an abdominal section is indicated in any case. Surgeons, too, should not be so inclined to wait until the symptoms of shock have entirely subsided. Shock will usually disappear with the cessation of hemorrhage, and frequently this stilling of hemorrhage can only follow an operation.

Injuries of the stomach usually give signs of free air in the peritoneal cavity and a metallic percussion note or simple hyperresonance, changing in site with change in position of the patient, should be diligently sought for. Circumscribed dullness, if found, should be immediately marked out on the abdominal wall; it may be due to an exudate and the increase in size may clinch the diagnosis. Larger area of dullness usually mean perforation of the small intestine with the infection of the peritoneal cavity by a considerable quantity of fecal material. Of course, none of these signs may be present in any given case. If, a short time after injury, the pulse is quickened, tenderness and reflex spasm of the abdominal muscles have appeared, there is spontaneous pain on deep inspiration, and the patient has become somewhat restless, injury of the intestines must be suspected, if there are no signs of extensive internal hemorrhage.

Ruptures of the urinary bladder are usually accompanied by fractures of the pelvis. Direct injury may rupture an overfilled bladder and this usually happens in drunkards. Vesical tenesmus, ineffectual or resulting only in the appearance of a few drops of blood at the meatus, is a very frequent symptom. Catheterization usually confirms the diagnosis; the difficulty is in deciding whether extraperitoneal or intraperitoneal rupture has taken place. V. Hippel closes his lengthy paper with the urgent advice to send all patients in whom an intra-abdominal injury is suspected to a hospital, so that immediate operation may be performed if the suspicions are confirmed by further study of the symptoms.

Pruritus Ani.—Wallis, in The London Practitioner, says that if the pruritus is due to something other than the abrasion, or hypertrophied papillæ, it is of a transient character and can be readily cured. Many local applications are palliative and comforting, and amongst them the following formula will be found useful:

Chloretone, 1 drachm.
Extract of conium, 1 drachm.
Euthymol cream, 2 ounces.

This is applied after the local skin area has been well washed with soap and water. When there is any skin irritation, such as eczema or erythema, the following lotion map be used:

Calamine, 1 ounce.
Zinc oxide, 1 ounce.
Liq. carbonis, 1 ounce.
Glycerin, 1 ounce.
Aq. calcis, 4 ounces.
Orange-flower water, 4 ounces.

The irritation can be relieved by the application of a 1-in-20 solution of carbolic acid, and a 2-per-cent. solution of tincture of iodine in rectified spirits will also produce temporary relief.

When the irritation is due to any small polypus, to prolapsing mucous membrane, or to hemorrhoids, their removal causes the pruritus to disappear.

Before proceeding to any other treatment it is well in all cases to examine the urine for sugar. He has in one or two instances in comparatively young people met with a condition of pruritus which was quite sufficiently obvious to call for treatment. On examining the urine of these cases it was found to contain a considerable amount of sugar, and when this was got rid of by dieting, etc., the pruritus disappeared.

The various operative measures of treatment may be limited to the three following: (1) Ball's operation. (2) Krause's modification. Both the foregoing are skin-flap operations. (3) Excision of the entire ring of the anorectal tissue—an operation which the writer has performed for this and other rectal troubles for the last twelve years.

In both the skin-flap operations it is said that the subcutaneous division of the nerves going to the skin area effects a cure by destroying the communication of an irritable nerve end with the skin, but in neither of these instances does it seem that the acknowledged cause of the pruritus is attacked. Good results have been reported in both these operations, and of the two perhaps Krause's is best. He makes from four to six linear skin incisions, radiating from the anus itself, and undercuts the skin between the adjacent incisions until the whole affected area is undermined, and when all the adhesions are loosened, and the bleeding stopped, the skin-flaps are replaced and sutured. Krause claims for his operation that there is better nourishment for the flap and there is less risk of sloughing, which has occurred at various times after the performance of Ball's operation.

Diagnosis of Scarlet Fever.—Gordon, in The London Practitioner, believes that scarlet fever is a mixed infection and that no one definite organism is the cause of the disease. The observation as given asserts that from a scarlet fever patient one of three conditions may be acquired. Scarlet fever, simple tonsillitis or severe ulceration of the fauces may be contracted. In either of these affections the origin is definitely streptococcal. The fallacy lies in the attention to lay stress on the eruption, according to the author. The discovery of bipord is not mentioned. As regards the throat symptoms, the point of most value is the co-existence of exudate on the fauces with a peeled and papillated tongue.

In a case where we are told that the patient has had scarlet fever; in the absence of desquamation or the throat signs mentioned there are two points of value. One of these is the presence of dark brown isolated follicular raised spots on the outer aspect of the legs or arms, not thighs or forearms. These, when well marked are practically diagnostic of scarlet fever, but they are not present in more than 50 per cent. of the cases of that disease. Another sign is slight albuminuria combined with repeated negative cultures for diphtheria bacilli from the fauces. Indefinite or profuse branny desquamations are not characteristic of any disease, and they may be produced by various washes. The presence of acute nephritis with blood in the urine colon, combined with desquamation is practically pathognomonic of scarlet fever. Otorrhea is not conclusive.

Retrograde Venous Embolism as a Cause of Acute Gastric and Duodenal Ulcer.—Wilkie (Edinburgh Medical Journal) throws considerable light on some clinical conditions. The close connection of the great omentum with the stomach and first part of the duodenum suggests the possibility of extension of morbid processes from the former, either by direct extension or through the vascular connections. Clinically, hæmatemesis has been noticed after abdominal operations, particularly when ligatures have been applied to the omentum. Von Eiselsberg, who recorded eight such instances, suggested retrograde embolism as a cause, and some experimental work was carried out by others in which gastric lesions were obtained in about 30 per cent. of cases after ligaturing the omentum. Hæmatemesis associated with appendicitis, both with and without operative procedures, has been repeatedly noticed. Others have more recently noticed an association between gastric, and particularly duodenal, ulcer and appendicitis.

A series of experiments was undertaken by the Dr, to ascertain if the omental veins were specially liable to thrombosis; secondly, whether emboli were apt to originate; and thirdly, whether an embolus starting in an omental vein could find its way to a gaftric or duodenal vein instead of to the portal vein. Investigations on animals showed that the omental veins were very susceptible to thrombosis after rough handling and exposure to cold or heat. Small hæmorrhagic infarcts were found in half the cases in the liver, indicating the frequency with which emboli escaped from the omentum. In cases in which the emboli were rendered septic by infection with s. aureus, embolism was even more frequent. Occasionally gastric lesions were produced from the escape of an embolism to the gastric circulation. In order to prove the possibility of retrograde embolism to the gastric vessels, sterile oil was injected into an omental vein, and the oil globules were readily followed. As a rule, they were carried towards the portal vein; not infrequently, however, if the animal coughed, or held its breath, or if the vessels were somewhat collapsed and the circulation poor, the oil globules changed their course, passing sometimes to the spleen, sometimes to the gastric veins. An important fact is thus brought out; namely, that the course of the blood current may be changed in these causes by slight alterations of blood pressure, such as is produced by cough, apnœa, or a poor circulation. Doubtless the absence of valves and the low blood pressure in the portal system favors this change in the direction of the blood flow.

Further experiments were undertaken by introducing artificial emboli, or charcoal, or dermatol. Gastric embolism was frequently produced, as indicated by the development of gastric ulceration, hyperæmia, or erosion in the neighborhood of the emboli. Vomiting seemed to favor the production of emboli in the gastric region. In a few instances there was embolism of the pancreatic veins followed by hæmorrhages, an observation which suggests a similar origin in cases of hæmorrhagic pancreatitis. The research is a valuadle one in indicating the ætiology of certain cases of gastric and duodenal ulceration.

Hereditary Cranio-Cleido-Dysostosis.—According to The London Lancet Fitzwilliams analyzes sixty cases, two of which came under his personal notice, while the rest were all that could be collected from the literature. The hereditary nature of the disease is well shown, eight families supplying no less than thirty-one affected individuals. The facial and cranial changes are discussed, and considered to be due to the same cause that produces the characteristic features in hydrocephalus, namely, that the base of the skull fails to develop with the increased growth of the brain and is accommodated by the opening of the vertex. The musculature of the altered shoulder-girdle is given at length. The state of the clavicle is analyzed, and shows that while the sternal portion is hardly ever absent the acromial portion is almost invariably lacking. The ligamentous prolongations, which replace the acromial portion in the majority of cases, do not extend to the acromion but go to the coracoid process. These facts throw considerable light on the development and morphology of the clavicle. This bone has long been suspected of being the result of the fusion of two separate elements, of which one is performed in cartilage and the other in membrane. The disease hereditary cranio-cleido-dysostosis retards and prevents the development of bones performed in membrane. The probable fate of the coracoid and precoracoid bars of cartilage in the promitive shoulder-girdle is theu discussed. He shows that the inner two-thirds of the clavicle, the coraco-clavicular ligament, and the base of the coracoid process itself are probably all part of the same bar, while the tip of the coracoid process and the bicornuate ligament are probably parts of a second bar. In one of the author's cases the first of these bars was intact and stretched from the sternum to the glenoid cavity. The dissections performed in this disease and the method of ossification of the coracoid process both tend to support the idea that the inner two-thirds of the clavicle, the costo-coracoid ligament, and the base of the coracoid process are the representatives of the true coracoid, while the bicornuate portion of the costo-coracoid membrane and the tip of the coracoid process represent the old precoracoid. The positions of the two bars are slightly modified by muscular attachments, while the acromial third of the clavicle is of a more recent ancestry, membranous in origin and possibly related to the dermal plate of lower vertebrates. Other possibilities are discussed, but seem to be less likely than the conclusions mentioned. As to the cause of the disease nothing definite can be said; its relations to achondroplasia are mentioned, and the suggestion thrown out that both may be due to a lack of some chemical substance or enzyme which is needed for sound ossification.

Mediastinal Causes of Chronic Cough in Children.—French in The London Lancet says that often, especially in towns, young children suffer from a persistent cough which lasts on and off for weeks and months without being materially relieved by any of the ordinary cough mixtures, lozenges, etc., yet without obviously abnormal physical signs to account for this cough. In one group of these cases there is chronic enlargement, sometimes associated with tuberculous caseation, of the glands at the bifurcation of the trachea. The bronchial gland immediately below the right bronchus is affected far more frequently than is the gland upon the left side, and the right phrenic nerve is frequently seen to be displaced by the enlarged lymphatic gland in such a way as probably to be much irritated by it and thus to lead to attacks of coughing which does not bring up sputum. In a certain number of cases it is possible to demonstrate the enlargement of this right bronchial gland by means of the X-rays, as a case described by the writer demonstrates. The importance of realizing that enlarged bronchial glands may be the cause of persistent coughing in children is that the enlargement is generally tuberculous, and therefore the correct treatment is to adopt the general hygiene best adapted to the relief of a tuberculous infection together with measures calculated to prevent the swallowing of more living tubercle bacilli, either by obtaining milk from cows that have been satisfactorily tested with tuberculin, or by making sure that any tubercle bacilli in the milk have been killed by efficient sterilization, preferably by thorough boiling.

Pathogenesis of Hemorrhages of the New-Born.—Bonnaire and Durante (L'Obstet.) have observed at short intervals in the same maternity hospital four cases of hemorrhage in new-born children, with death due to peritoneal inundation. In the liver, ecchymoses and small hemorrhages into the tissues, interstitial and subcapsular, are frequent, especially in the course of infections. These, while clinically latent, are found at autopsy, causing only secondary symptoms. Hemorrhages causing death are rare. Besides predisposing lesions there must have been present congestive phenomena and a peculiar fluidity of the blood. Out of 5,000 autopsies in the new-born only one example was found in ten years. After giving the histories of the four cases observed the authors state that each liver was in a different stage of alteration and degeneration, forming a series. The capsule of Glisson was thickened and infiltrated; the parenchyma was infiltrated with small cells; the hepatic cells were altered; and the blood vessels were changed so as to predispose to hemorrhage. The hemorrhage was abundant enough to fill the abdominal cavity. It came from the rupture of subcapsular hematomata, some important vessel being opened. Bacteriologically, in three cases they found an encapsulated diplococcus, colored with Gram stain. It was found in the liver parenchyma near the hemorrhagic foci. We find thus an inflammatory hepatitis caused by a slow infection of the biliary passages. They suggest that this was an epidemic of such hemorrhages, all arising from a common cause. Predisposing causes are hemophilia, syphilis, and intoxication. The writers sum up the causes of infection: under the influence of a chronic infection or intoxication of the mother there are vascular lesions of the liver with degeneration, lessened fibrinogen and diminished coagulability of the blood. At birth an intoxication takes place due to germs, with polyglobulia, leukocytosis, and congestion. The altered capillaries and vessels rupture. Hemorrhage continues, due to failure of the blood to coagulate, and death ensues. At the time of these cases there was an epidemic of grippe in the city.

Origin of Uterine Muscle in Relation to Blood Vessels.—Clarke (Jour. Obs. Gyn. Brit. Emp.) says that during fetal life the uterus has a trabecular arrangement, and the arteries appear to grow into the trabeculæ from the broad ligament. The venous spaces seem to rise in situ. There is extremely pronounced growth of the muscular tissue of the arteries in the uterus. This increase was computed at 28.57 per cent. during the later five and a half months of fetal life, and 15.55 per cent. from birth to the end of the period of childhood. During infancy a cavernous condition exists in the mesometrium, and by arterial invasion of the venous spaces the condition of the adult uterus is attained. This process, which the writer calls "condensation," is completed by the end of the period of childhood—six to seven years. Cavernous tissue and condensation were observed in the wall of the Fallopian tube, and to a slight extent in the vascular structures of the vaginal wall. The cavernous tissue of the mesometrium is similar to that which exists in erectile tissues, e.g., corpora cavernosa; also to the sponge-work in the fetal heart of man and the adult heart of some amphibians. The venous spaces in the cavernous tissue of the human uterus are not obliterated, but remain as potential rather than actual spaces. They have a delicate endothelial lining, and external to this a fibrous connective-tissue layer. They are concerned in erection of the uterus and in the formation of maternal blood sinuses during pregnancy. The development of uterine muscle during fetal and infant life takes place in definite relation to vascular structures. In other words, it is in the development of muscular tissue in the trabeculæ of the mesh-work of cavernous structures and the muscular growth in the walls of the arteries that the growth of the mesometrium takes place. Injected specimens show that the arteries communicate with the venous spaces, and also serve to indicate the great vascularity of the uterus in animals.

Alcohol for Hand Disinfection.—Tchumburg in the Deutsche Medizinische Wochenschrift, says that washing the hands with strong alcohol is a most effective means of removing all infection and rendering any bacteria innocuous. He says that 200 c.cm. of alcohol applied with a pledge of cotton-wool are sufficient to disinfect the hands to the extent of 99 per cent. or more of all bacteria present. Ordinary methylated spirit is quite effective. From experiments in the medical department of the Prussian Ministry of War it appears that washing with soap and water combined with even prolonged scrubbing with a brush does not remove the microbes, the soap softening the skin and making the bacteria more adherent. Alcohol, on the other hand, by hardening the skin, causes the bacteria to become rapidly detached. To secure proper disinfection with alcohol the preliminary use of soap and water must be dispensed with, the reasons given being that the residual moisture, even after drying, dilutes the alcohol, and further that the softening of the skin by water causes it to contract too strongly when the alcohol is applied, and by rendering it rough and scaly encourages the transference of bacteria from the surgeon's hands to the wound. Inasmuch, however, as the wearing of gloves for operations has been now so generally adopted, disinfection of the hands has not the same importance that it once possessed for the success of aseptic surgery.

Prolonged Pregnancy.—Wright (Can. Med. Assoc. Jour.) states that it would be well for both mother and child to make it a matter of routine to induce labor in all cases within a few days after term. One of the objections raised is that we cannot always tell when the patient has reached "term." In any case of doubt, the accoucheur may obtain evidence by both external and internal examination which may assist him in arriving at a correct conclusion. If the matter still remains doubtful, it may be well to wait for one week before inducing labor. It is safer, however, to induce labor one or two weeks before "term" than two weeks after. The growth of the child in utero after it becomes viable is very rapid. At the end of seven months the average weight is 1,400 gm.; at the end of eight months, 2,200 gm.; at the end of nine months, 3,470 gm., the increase in the latter month being nearly 58 per cent. The probable increase in the tenth month is 2,000 gm. In other words, a child weighing 7 pounds at term will weigh 11 at the end of another month. A child weighing 9 pounds will weigh 13 or 14 pounds. In addition, the child loses, to some extent, its flexibility; "universal flexion" is not so marked; worse still, the head becomes hard because of ossification. We cannot speak so definitely as to the effects on the mother. Her nervous system is more or less seriously affected, she is frequently much depressed, and her general health is impaired in many ways. The difficulties we meet in conducting the labor are always great. The large ossified head neither molds nor flexes properly. In an unduly large proportion of cases the occiput turns to the rear. The uterine contractions are very painful, and unsatisfactory in many ways. They commonly become weaker, or cease altogether just at the time when the expulsive forces are required. Interference is generally necessary, and the results are frequently, if not usually, disastrous for both mother and child.

Tuberculosis of the Cervix Uteri.—Bendec (Rev. de gyn.) says that tuberculosis of the cervix uteri is somewhat uncommon. The Dr. operated on a case in which the nature of the disease was not at all understood until it was found at operation. Examination of the results of curettage did not show anything but metritis. There were no symptoms of tuberculosis of other organs, and there has been no recurrence up to the time of writing, more than two years. Generally tuberculosis of the cervix is associated with disease of the adnexa or the uterine mucosa. There are three varieties, miliary, papillary, and ulcerative. Chaton found an interstitial form. The ulcerative form is most common, there being a single ulceration on one of the lips, and with granulations over its base. Metrorrhagia is a frequent symptom, with abundant leukorrhea. Pain is not marked; weight is complained of, and lumbar and crural pains. Fever is not present. The best treatment is generally hysterectomy. In the author's case an amputation of the cervix has been successful in curing the disease.

Blood Pressure in Diphtheria.—Rolleston (Brit. Jour. Child. Dis.) reports that in a series of 179 cases of diphtheria the blood pressure was found to be subnormal in sixty-three patients, or 35.1 per cent., the extent and duration of the depression having, as a rule, a direct relation to the severity of the faucial attack. In the great majority the highest readings were found in the first and the lowest in the second week of disease. The normal tension was usually re-established by the seventh week. In a large proportion of convalescent cases either the readings in the recumbent and erect positions were the same, or the recumbent was higher than the vertical record until convalescence was firmly established. In laryngeal cases disproportionately high readings were obtained, especially when the dyspnea was sufficiently severe to require operation. Relief of the obstruction by tracheotomy was followed by an immediate and steep fall of blood pressure (20 to 40 mm.). The blood pressure showed little tendency to be affected by the early serum phenomena, but during the late febrile syndrome it was raised in 40 per cent. Albuminuria was accompanied either by a fall or by no change in the blood pressure, except in a case of uremia, in which there was hypertension. In early paralysis the blood pressure tended to fall. In late paralysis, even when extensive it was usually not affected. Sphygmomanometry in diphtheria, as in other acute diseases, though of considerable theoretical interest, has little practical significance. Adrenalin therapy in diphtheria may favorably influence the other symptoms of suprarenal insufficiency without affecting the blood pressure.

Specific Treatment of Gonorrhea with Especial Reference to Cervical Gonorrhea.—Schmidt (Munch. med. Woch.) says that the cure of cervical gonorrhea is very doubtful in many cases. The Dr. has made a study of the action of gonorrheal vaccines in the treatment of this form of gonorrhea. He treated twenty-four cases of cervical gonorrhea with two kinds of vaccine, that of Bruck and of Reiter. Of these, twelve were entirely cured according to the most rigorous interpretation of the condition of cure. Microscopic examinations of the discharge from these cases was made four to ten weeks after treatment, especially after the menstrual periods. Eight of these cases were treated with arthigon and sixteen with Reiter's vaccine. His conclusions are that in epididymitis, and some of the cases of cervical and vulvovaginal gonorrhea the gonococcus vaccines give a cure; the best results in vulvovaginitis are obtained in children. Prostatitis and spermatocystitis are favorably influenced. In gonorrheal arthritis only relief of pain is secured. With urethral gonorrhea there were no good results. Many of the cervical gonorrheas were not cured by either of the vaccines. Neither of the vaccines appeared to be superior to the other. No headache, fever, or local reactive symptoms from their use were observed by the author.

Treatment of Retroflexion of Pregnant Uterus.--Graefe (Monatschrift fur Greb. und Gynak., Ber.) has studied conditions in regard to the disturbances from this cause in two hundred patients and has found that sixty-one had experienced no local discomfort from this displacement of the uterus. The pregnancy was in the second or fourth month and in two of these patients the uterus was very laige, owing to the additional presence of a myoma. These sixty-one cases show that retroflexion does not necessarily cause pain or discomfort even when the uterus is unusually large. One patient in this group had had severe sacral pains but after cure of a coincident suppurative catarrh of the cervix and large erosion the pains vanished permanently, although the retroflexion persisted uncorrected. Only seventeen of the total two hundred complained of a sensation of downward pressure and only seven of pressure on the rectum. In six of these seven this sensation persisted after the uterus had been restored to health, suggesting that it was purely a nervous phenomenon. None of the patients complained of disturbances in defecation. Only twenty-five of the total two hundred complained of traction on the bladder and tenesmus, and these were eight women in the second month, twelve in the third, four in the fourth and one in the fifth month of pregnancy, while thirty eight other women from two to six months pregnant had no bladder disturbances, not even the two with incarcerated retroflexion. One patient complained of pain radiating to the leg, but it persisted unmodified after the uterus had been restored to place. As a rule disturbances were noted only in women inclined to nervousness or hysteria. Abortion occurred in only thirty-one of the two hundred cases, the interval after correction ranging from the first days to four months, and in two of these cases the abortion was criminally induced, while the other women had severe venereal disease. Graefe thinks that the retroflexion alone does not induce abortion but that it has a favoring influence when the uterus is already pathologic. Severe pain and hemorrhage, even slight, indicate at once correction of the retroflexion, as also incarceration of the retroflexed uterus, and in any event he thinks that an attempt should be made to correct the displacement, as labor pains and hemorrhage may occur at any moment. A point of great importance in the correction is to keep the bladder empty. Correction succeeds sometimes only with the patient in the knee-elbow position. In some cases the uterus rights itself in a day if the patient lies on her side, or, better yet, in the ventral decubitus in bed. In one incarcerated case the uterus righted itself in six hours after an inflatable bag had been introduced into the vagina and filled with 400 gm. of water. If the adhesions are tough and the patient suffering and all other means fail, a laparotomy becomes necessary although he had to resort to it only in one case. Goldberg's maneuver accomplished the purpose in two cases.

Progress in the Treatment of Diphtheria.—Meyer (Berl. Klin. Woch.) gives in order the curative effects of serum, the prophylactic effects of the same, and the non-specific treatment. It has been thoroughly shown that the intravenous injection is superior to the subcutaneous method, and should be preferred in all cases which give early information of severity, such as hemorrhagic forms of the disease. The technical difficulties, however, are too great to permit of routine application. If the vein cannot be exposed properly the intramuscular injection should at once be practiced, and must suffice whenever the intravenous method seems impracticable. If injected in maximal high doses, antitoxin by the intramuscular route may have the curative power of intravenous injections. But if a massive early intramuscular dose is inoperative it may be best to make the next injection into a vein, and the latter would be the method of necessity in cases seen late. Evidently a practitioner of expert knowledge might need to be summoned for an intravenous injection. Serum disease is variously combated with thyroidin, aspirin, and calcium salts. Under large, promptly given and promptly acting doses many favorable statistics confined to grave types of disease are accumulating. On the other hand prophylactic injection seems to be overdone, and many authorities would restrict its use to certain categories of those exposed. Serum disease is by no means confined to those who had already received an injection. Sensitiveness to horse serum is found in many who spend their time in stables, while some people are so supersensitive in this way that a mere temporary exposure may cause asthma or other vasomotor disorder. Asthmatics of any kind and those with respiratory affections in general seem predisposed to severe serum disease. The immunizer should have everything ready to treat sudden collapse after a serum injection, rare as the need for it may be. There have been no advances in the non-specific treatment of diphtheria which have received general acceptance.

Mediastinal Causes of Chronic Cough In Children.—French (Brit. Med. Jour.) believes that chronic enlargement, sometimes associated with tuberculous caseation, of the lymph nodes at the bifurcation of the trachea is a cause in these cases of chronic cough. The bronchial node immediately below the right bronchus is affected far more frequently than is the node on the left side, and the right phrenic nerve is frequently seen to be displaced by the enlarged lymph node in such a way as probably to be much irritated by it and thus lead to attacks of purposeless coughing—that is to say, coughing which does not succeed in bringing up any sputum. In a certain number of cases it is possible to demonstrate the enlargement of this right bronchial node by means of the Roentgen rays. The author suggests that the attacks of coughing which are so troublesome in some heart cases are to be explained by irritation of the phrenic nerves in a similar way, by their being displaced and stretched by the dilated and hypertrophied heart. The importance of realizing that enlarged bronchial lymph nodes may be the cause of persistent coughing in children is that the enlargement is generally tuberculous, and therefore the correct treatment is to adopt the general hygiene best adapted to the relief of a tuberculous infection together with measures calculated to prevent the swallowing of more living tubercle bacilli, an end to be accomplished either by obtaining milk from cows that have been tested satisfactorily with tuberculin, or else by making sure that any tubercle bacilli in the milk have been killed by efficient sterilization, preferably by thorough boiling.

Treatment of Diabetes.—Noorden (British Medical Journal) holds that the older view of the causation of diabetes, the view, that is, that the hyperglycaemia of diabetes results from an overproduction of sugar in the liver rather than from diminished oxidization in the tissues, is the true one, and that it is no longer a theory, but is supported by a considerable body of evidence. Thus in Bernard's puncture glycosuria only occurs if the liver is filled with glycogen and in this form and in glycosuria due to certain forms of poisoning, as, for instance, poisoning by diuretin, the glycogen of the liver is quickly used up, while there is nothing to indicate that the power of oxidization of sugar bv the tissues is diminished. The study of glycosuria caused by adrenalin is even more confirmatory, for if large doses be given and no more glycogen is available from the liver, fats and proteins are broken down to form sugar, and it is thus seen that adrenalin is an active promoter of the sugar-forming process, while there is no sign at all that it lessens the action of the tissues upon the sugar in the blood. Again, the respiratory quotient, that is, the ratio of the carbonic acid products to the oxygen used up, is strikingly low in diabetic patients. The conclusion that the low co-efficient depends upon lessened oxidation is hasty, for it may be that the action of the tissues upon the sugar in the blood is normal, but that as a result of faulty metabolism in diabetes, fats and proteids have gone to produce the sugar in the blood. The liver has long been recognized to be the regulator of the sugar contents of the blood, but the pancreas and the suprarenals are now also known to be concerned in the process. The author's opinion is that anomalies of the pancreas, usually functional, play a leading part in by far the greater number of cases of diabetes mellitus whether slight or severe, but that the suprarenals seem to play the chief part in acute transitory cases of glycosuria. The conclusion that diabetes depends on over-production of sugar has a bearing upon questions of treatment.

Residual Urine in Old Men.—Miller (London Practitioner) says that he has a two-fold object for the treatment suggested in this article. (1) To improve the muscular tone of the bladder by exercise and to train the bladder to empty itself. (2) To enable it to acquire a good habit. He advises those having residual urine after passing water in the usual way to wait a minute or two and then try again. Practice this as frequently as possible, till only a very small quantity can be squeezed out (say, half an ounce). When this point has been reached, twice or thrice daily may suffice. The most important times are before going to bed and on rising in the morning. On these occasions it may be advisable, at first, to make three, or even more, efforts so as to make sure of thoroughly emptying the bladder. It is not advisable to wait too long before making the second effort. About one minute is generally quite sufficient, certainly not more than two; because after the act of expelling the urine the bladder may quiet down if the patient waits too long, and a considerable effort may be required to start the flow again.

Operative Treatment of Prolapse of Rectum in Children.—Sack (Mastdarmvorfall bei Kindern Therap. Monat.) after reviewing the many different methods for the cure of rectal prolapse in children advocates tamponing the retrorectal space according to Ritter's modification of the Sick operation. The incision is made from the tip of the coccyx to the edge of the sphincter, the loose connective tissue behind the rectum is opened bluntly up to the promontory and then a passage is made entirely around the lower segment of the rectum. Through this opening a strip of gauze is worked, encircling the lower rectum and the ends are brought out crossed, and sutured to the skin above the coccyx. The retrorectal space is then tamponed and the incision closed except for the drainage opening. In this way the rectum is made to adhere firmly to the surrounding tissues and the tendency to prolapse is cured. Sack has operated on two cases by this technic, both cases resulting in a perfect cure. The tampons were removed the fifth day and the children were allowed to be up and about from the first. There was no interference with defecation and the encircling strip prevents prolapse while the adhesions are forming.

Treatment of Torticollis.—Roth, in The London Lancet, states that after congenital torticollis has been treated by tenotomy no retentive apparatus is necessary though it is usually advised by writers that such an apparatus be worn for weeks or months. The author has operated upon four cases of torticollis. After division of the muscle and fasciæ by the open operation the head was firmly manipulated into an over-corrected position. The child was then put back to bed with the head between sand bags, and on the second or third day was allowed up and gentle passive movements were begun. On the fifth or sixth day active movements took their place, and after removal of the stitches the mother was shown how to superintend the carrying out of these movements at home for five minutes twice a day. These four patients are completely cured; a year after operation the child holds his head perfectly straight; he can twist his head round to look over one shoulder just as well as over the other, and only by finding the operation scar can the affected side be discovered.

Dysmenorrhea.—Blacker, in The London Practitioner, says that in undertaking the treatment of a case of dysmenorrhea the improvement of the patient's general health and nutrition is of great importance, as in many cases of spasmodic or neuralgic dysmenorrhea the sufferer is a young girl of an unhealthy type and in delicate health. For the relief of the pain itself reliance must be placed upon free purgation, rest in bed, the application of warmth to the pelvic organs, and the administration of sedative and antispasmodic drugs. It is important to avoid the use of alcohol and the more powerful narcotic drugs. When the coal-tar preparations, such as phenacetin or antipyrin, are ordered some stimulant should be combined with them to counteract their depressant effect upon the heart. Alcohol should, however, not be prescribed for this purpose, but some such preparations as caffeine or spiritus ammoniæ aromaticus. Another very useful drug for the relief of the pain is aspirin, or acetyl-salicylic acid. It may be given in doses of 5 grains every two hours for three doses, and then four hourly. Bromides, Hoffmann's anodyne, cannabis indica, belladonna, viburnum prunifolium, hydrastis canadensis, and valerian will all prove useful. Morphine, given only by the physician and without the patient's knowledge, should be employed only when pain is very severe and all other methods fail. There is little agreement as to the exact value of electricity for the relief of dysmenorrhea. The beneficial effect of forcible dilatation of the cervix is undoubted. It should be reserved for cases of spasmodic or neuralgic dysmenorrhea. In cases of membranous dysmenorrhea the uterus should be curetted after the cervix has been dilated, and tincture of iodine or some similar preparation applied to the interior of the uterus should, if the condition persists, be repeated on several occasions. If there is uterine congestion, as evidenced by menorrhagia, the uterus may be curetted in a simple case of spasmodic dysmenorrhea, and the same treatment is said to produce a good result when the uterus is undeveloped, as it not infrequently is in these cases. Dysmenorrhea associated with an undeveloped uterus can only be treated on general lines. In the majority of instances dysmenorrhea is cured by marriage and pregnancy, or in other cases in the course of years the pain improves or disappears entirely. In a very small percentage of cases, the pain is so severe and the condition of the patient such that relief must be obtained; for example, in the case of a woman who has to gain her livelihood and who can obtain relief from the pain only by the administration of morphia. In such a case it may be justifiable to recommend the removal of the body of the uterus.

Post-Operative Complications of Superative Frontal Sinusitis.—Sieur and Rouivillois(Revue Hebdomadaire de Laryngologie) have gathered the following statistics of complications that occurred after the external operation on the frontal sinus: Two hemorrhages, seventeen orbito-ocular disturbances (deformities of the eye-lids, diplopsy, phlegmone of the orbita, atrophy of the nerve head, optic neuritis caused by pyaemia or thrombosis, etc.), three osteomyelitis, two thrombophlebitis and septicopyaemia, three slight and twenty-seven serious meningitis, in the latter being included extra- and intra-dural abscesses and three abscesses of the brain.

After intra-nasal operation of the frontal sinus encephalitis, meningitis, fracture of the apophysis of the crista galli and other complications occurred. The predisposing moments from the side of the patient are: The "milieu" (in winter there are more infections in a hospital than in summer), age, sex, general condition of the patient (lues, phthisis, infectious diseases, especially scarlet fever), local conditions (anatomical abnormalities, dehiscences, involvement of other sinuses) and virulence of the affecting bacteria. The predisposing moments from the side of the operator are: Damage done to neighboring organs, infection and incomplete oyeration.

As prophylactic measures the writers advise the removal of the middle turbinate and of all polyps and the curetting of the ethmoidal cells intra nasally, before the external operation is resorted to; the latter should always be performed under local anaesthesia, as by the mask and the other appliances of general anaesthesia infection is liable to occur. The trepanation of the bone, the curetting of the frontal cavity and of the ethmoidal cells must be done with utmost care and thorough external and intra-nasal drainage has to be established.

They come to the conclusion that no more postoperative complications of suppurative frontal sinusitis will occur, when the specialists will finally be thorough clinicians while making the diagnosis and perfect surgeons, mastering the most recent technic, while operating upon the patient.

Operative Treatment of Badly United Fractures.—Lane (London Medical Lancet) reports two cases, one of which was a badly comminuted fracture of the femur which was operated on five months after the bone had been broken, and the other, multiple fractures of the tibia and fibula operated on twelve weeks after the injury. Both cases had been under the care of very eminent surgeons and in neither, apart from operation, was there the slightest prospect of restoring the patient to active usefulness. Both cases are illustrated by radiograms taken at intervals. They are of particular interest since they show the manner in which callus serves to render secure the junction of a broken and deformed bone in which it has been impossible to obtain any large area of bone apposition without shortening the limb very materially and so reducing its usefulness and the symmetry of the individual in a corresponding degree. Thy also show that the crystallization of lines of force takes place progressively in a marked manner later in life and for a long period after the union of the fractured ends has been effected. This entails the careful retention of the leg for a considerable time in an apparatus by means of which the weight of the body is transmitted from the tuberosity of the ischium to the foot. Such an apparatus enables the patient to get about at an early stage of convalescence, while the gorging of the limb with blood consequent on the dependent position of the leg during locomotion assists very materially in the formation of callus. Lane urges that great care should be taken to encourage this engorgement within reasonable limits and to avoid any direct pressure on the seat of fracture which is likely to reduce its blood supply.

Miscellaneous.

State Board Examination Questions of Texas.

ANATOMY.

1. Describe the clavicle.
2. Describe the elbow joint.
3. Give origin and insertion of the following muscles: Posterior tibial, flexor carpi radialis.
4. Describe the internal iliac artery; give relations of anterior tibial artery.
5. Describe the vagus nerve.
6. Name and locate the ductless glands.
7. Give relations and nerve supply of kidney.
8. Describe the lower lobe of the left lung.
9. Name the ligaments of the uterus.
10. Briefly describe the common bile duct.

HISTOLOGY.

1. Give the relation of the various constituents of the blood to each other.
2. Give the diagram of a cross-section of the shaft of the humerus. Describe the Haversian system and show the relation of

the parts to each other.

3. Give the constituents of bone relative to the organic and inorganic parts.

4. Define cartilage. Define the following cartilages and tell where found: (a) Hyaline; (b) White; (c) Interarticular; (d) Connecting; (e) Circumferential; (f) Stratiform; (g) Reticular.

5. Describe striped and unstriped muscle, and name organs in which unstriped is found.

6. Where is the (a) Axiscylinder Purkinje? (b) White substance of Schwann? (c) Neurilemma?

7. What is the relative difference between the sympathetic and cerebrospinal fibers?

8. Name the layers of the skin from within outward.

9. Name the coats of the arteries and give structural difference.

PHYSIOLOGY.

1. Name and classify the principal nerve upon which the function of voice depends

2. In what three important organs of the body is the existence of vasomotor nerves still an uncertainty?

3. Give function of the gall bladder; state whether or not the flow of bile into the duodenum, in the normal subject, is continuous and uniform.

4. Give the principal factors controlling the flow of lymph; in what respect does its circulation differ from that of the blood?

5. Give the four principal ways in which heat is regularly lost from the body and the percentage of each.

6. Give definition of a carbohydrate; give four functions of carbohydrate foods.

7. Give specific gravity, chemical reaction, average daily quantity, and constituents of normal urine.

8. Give chief source, average daily quantity excreted, and where formed of urea.

9. As it applies to caisson work and in the therapeutic use of oxygen, give the effect of breathing (a) condensed (b) rarefied air; give symptoms of increased and decreased percentages of oxygen.

10. Give specific gravity and chemical reaction of gastric juice; name its principal enzymes and give action of each in the process of digestion.

CHEMISTRY.

1. When is an element in what is called the "nascent" state?

2. Define catalysis.

3. Give a brief summary of the "ion" theory.

4. Describe a reliable test for free hydrochloric acid in the stomach contents.

5. Describe "Gmelin's" test for bile in the urine.

6. Describe a practical test for each of the following: (a) albumin, (b) sugar, (c) indican, in suspected urine.

7. Give (a) symptoms of poisoning from, (b) treatment of same, (c) quantity sufficient to cause death, and (d) a test of iodine.

8. State (a) fatal dose, (b) symptoms of poisoning from, and (c) a test for cyanide of potassium.

9. Salicylic acid is sometimes used as a preservative. Say how you could detect it in a food or beverage.

10. Give (a) symptoms, (b) treatment, and (c) a test for acetanilid poisoning.

BACTERIOLOGY.

1. Name the organism that causes gonorrhea.

2. What important disease is caused by the Klebs Loeffler bacilli?

3. What is antitoxin? How is diphtheritic antitoxin prepared?

4. Describe the process of staining tubercle bacilli in sputum.

5. Name the most important pus-producing bacteria.

6. What important disease is produced by the Amœba coli?

7. What microorganism causss tetanus, and why is it so necessary to open up punctured wounds immediately after the reception of injury?

8. What microorganism is considered the cause of erysipelas?

9. What temperature is required for the growth and cultivation of all disease-producing bacteria?

10. What microorganism causes influenza?

PHYSICAL DIAGNOSIS.

1. Name and describe the physical signs in the three stages of croupous pneumonia.

2. Physical signs of chronic interstitial pneumonia.

3. Physical sign of pneumonokoniosis.

4. Physical signs of cardiac hypertrophy.

5. Physical signs of cardiac dilatation.

6. Physical signs of serofibrinous pleurisy.

7. Physical signs of aortic regurgitation.

8. Physical signs of plastic pericarditis.

9. Give differential diagnosis, from physical signs, of acute dilatation of the heart and pericarditis with effusion.

10. Define and describe amphoric respiration, and state of what condition this breathing is pathognomonic.

PATHOLOGY.

1. Name some of the varieties of degeneration.

2. Name some of the results of endocarditis.

3. Define endarteritis. What are the dangers to the tissues in endarteritis obliterans?

4. Name the blood and glandular changes in lukemia.

5. How would you distinguish between fatty degeneration and fatty infiltration?

6. What two pathological conditions result from altered secretion of the thyroid gland?

7. What do you understand by the union of a wound by first intention?

8. Name the common malignant tumors of the breast.

9. Define the difference between a thrombus and an embolus.

10. What is the pathology of typhoid fever?

OBSTETRICS.

1. Give signs and symptoms of pregnancy.

2. Give symptoms and signs of approaching labor.

3. Name the diseases from which a mother should be carefully protected before and after labor. (b) Explain protective measures.

4. Give, in detail, management of a normal labor.

5. Give types of placenta prævia and their treatment.

6. What would you do if the waters were drained off and a hand and foot were found presenting together?

7. (a) In case of twins, if the first came feet first, what special care should you take in delivering the head? (b) Why?

8. Define puerperal eclampsia. (b) Give treatment before, during, and after labor.

9. State how you would manage an infant after its birth. (b) What attention should the baby's eyes receive?

10. Give explicitly the treatment of abdominal pregnancy from conception to termination of pregnancy.

GYNECOLOGY.

1. Define ectopic gestation and mention three of the most important diagnostic symptoms of tubal pregnancy.

2. If a tubal pregnancy is diagnosed before rupture, what treatment would you advise? Describe technique of operation for tubal pregnancy.

3. (a) Mention three pathological types of endometritis (b) In what class of patients would you suspect that an exciting endometritis was tuberculous, and what steps would you take to confirm the diagnosis?

4. What diagnostic significance would you attach to post menopause hemorrhage from the uterus?

5. Mention three of the earliest symptoms of cancer of the cervix uteri, and mention three other conditions of the cervix with which it might be confused.

6. Give three clinical symptoms of retroversion of the uterus and indicate treatment.

7. Mention five distinctly diagnostic symptoms of carcinoma of the breast.

8. When should lacerated perinea be repaired, and why? Give a brief reason for your answer to this question.

9. (a) What are the clinical symptoms of dysmenorrhea? (b) Mention four types of dysmenorrhea.

10. Briefly describe a typical case of chronic pyosalpynx and differentiate it from appendiceal abscess and tubal pregnancy.

SURGERY.

1. How would you manage a fracture of the lower and middle third of the shaft of the femur?

2. Give differential diagnosis of luxation of the hip and fracture of the surgical neck of the femur. Give methods of managements of each.

3. Give indications for gastroenterostomy. Give operative technique.

4. When and why would you advise the drainage of the gall-bladder? Give indications for extirpation of gall-bladder and give operative technique of the extirpation of the gall-bladder.

5. Give differential di .gnosis of concussion and compression of the brain. Give indications for trephine. Give operative technique.

6. Give indications for ligation of middle meningeal artery. Give location and operative technique.

7. Give operative technique for acute, non-suppurative appendicitis; acute suppurative appendicitis; acute perforative or gangrenous appendicitis without abscess; acute perforative or gangrenous appendicitis with abscess.

8. Give clinical symptoms of floating or movable kidney and operative technique for nephrorrhapy.

9. With no union for three months after compound-comminuted fracture below knee, where there were necrosis and suppuration, would you or would you not advise amputation? Why? Give operative technique.

10. Give clinical symptoms of empyema. Give operative technique.

HYGIENE.

1. Explain the difference between contagious and infectious diseases and give examples.

2. What infectious or contagious diseases are communicated through the medium of the air? What through foods? What by insects? What method can you suggest for combating the latter?

3. Explain the presence of hookworm in the body. What do you recommend to lessen the prevalence of the disease?

4. Name five diseases commonly regarded as requiring regulation by quarantine and state the time necessary to maintain same in each case.

5. What methods would you employ to determine the cause of an epidemic of typhoid fever in your community?

6. Given a case of diphtheria to attend, outline in detail what measures you should adopt to protect the community against an epidemic.

7. How would you determine whether drinking water and milk suspected of being unfit for domestic use was safely pure or not? What precautions should be advised pending such decision?

8. Name three reliable fumigation agents and give detail for procedure for the use of one of them following a contagious case.

9. What hygienic measures should be observed in the management of pulmonary tuberculosis?

10. What precautions should be taken to secure and maintain a pure supply of cistern water?

MEDICAL JURISPRUDENCE.

1. Define insanity and give the best classification for legal purposes.

2. What do you understand by "superfetation" and hpw distinguished from twin pregnancies?

3. Define and give difference between impotence and sterility.

4. What are the elements of responsibility in criminal malpractice, and the relief from such responsibility?

5. How should blood stains be studied? And how would you distinguish the human blood globule from that of other sources?

6. In order to convict for infanticide, give four positive elements of criminality that the law requires.

7. What are the post-mortem signs found in the new-born after asphyxia? After strangulation? After starvation and exposure?

8. Describe death from electricity and give post-mortem appearances. Where does the medicolegal interest come in?

9. Describe in very minute detail an autopsy.

10. Define rape and tell what three conditions are necessary to be produced by medical testimony to prove rape.

Salvarsan Milk.—According to Taege and Duhot it is possible to treat congenital syphilitics by injecting the mother with salvarsan. Though the milk contains only an infinitesimal quantity of arsenic it is powerfully curative owing to the fact that it probably contains antibodies formed in the maternal tissues through the destruction of the spirochaetes. These two authors, indeed, went so far as to state that the milk of a syphilitic woman who had undergone salvarsan treatment was the best method of treating syphilis in the nursing infant. It was even suggested that it should have for choice a syphilitic wet-nurse, if the mother was unable to undertake the lactation. More recent investigations of Jessionek (Munch. med. Wochenschr., 30th May, 1911) have thrown considerable doubt upon these claims of Toege and Duhot. He states that after intravenous injection of salvarsan the milk does contain appreciable quantities of arsenic, and he has detected it on the fifth day after the injection. The same holds true for goat milk, which for some days after the administration of salvarsan contains arsenic. It is not clear in what form the arsenic exists. He found that the salvarsan milk undoubtedly exercised a powerful effect upon the syphilis of the child, but in addition to the therapeutic influence he aiso noticed a curious effect produced in the first few days the milk was administered. In treating syphilis with salvarsan it is not uncommon to observe a "Herxheimer" reaction, viz., an inflammatory hyperaemia surrounding the pre-existing cutaneous lesions. In two infants suffering from congenital syphilis the mother's milk produced, in the first two days after the salvarsan injection, a well-marked roseolous syphilitic eruption on the skin, though before this each child had been quite free from such rash. This, therefore, was not an intensification of a pre-existing rash, but rather the bringing out of a quite new eruption. The eruption in the one case was not attended by any severe symptoms, but in the second case the child became seriously ill, and did not improve till the mother's milk was stopped. The eruption did not last more than a few days, but in each case it reappeared on giving the mother a second injection of salvarsan. Ehrlich, in discussing the therapeutic possibilities of salvarsan milk, suggested that the antibodies produced in the mother's tissues passed into the milk and were absorbed by the child. Jessionek points out that the antibodies are formed after the destruction of the spirochaetes, and it is, therefore, equally probable that in the first few days the milk will also contain endotoxins set free by the destruction of the spirochaetes. In Taege's and Duhot's cases the salvarsan was injected into the gluteal muscles, and hence the absorption of the drug was not very rapid. In Jessionek's cases the salvarsan was injected directly into the vein, with the result that the destruction of spirochaetes was probably much more energetic, and consequently there was a greater liberation of endotoxins. These endotoxins passed into the mother's milk, and on absorption by the child result in some change in the spirochaetes of the infant, possibly sensitizing them, which is manifested clinically by the cutaneous rash. As regards the factor in the milk, which induces the beneficial influence upon the infant's condition, Jessionek thinks that in addition to the antibodies the arsenic may also play an important part. To test this theory he fed a child aged 5 years, who was suffering from acquired syphilis, with the milk of a healthy goat which had been injected with salvarsan. The syphilitic manifestations cleared up in a very rapid fashion, which showed that the specific antibodies are not necessary. As the result of his unfortunate clinical experiences, Jessionek warns against the use of salvarsan milk immediately after injection of the drug into syphilitic subjects. During the first few days the milk contains large quantities of endotoxins, and the absorption of them may seriously damage the child.—Edinburgh Medical Journal.

Sea-Water Injections in Toxaemia.—Macfean and Harston, in The London Lancet; mention a patient, a married woman, aged 60 years, who suffered from toxaemia of uncertain origin, manifesting itself in pain in the joints and muscles, foul tongue. constipation, and a temperature of 100° F. Ordinary treatment had no effect, and her condition became worse. emaciation increased, there was continuous low fever, and later blood and mucus were passed in the stools. Bacillus coli vaccine was tried without any result. Finally injections of sea-water were given, 25 to 50 c.c. being injected, under strict aseptic precautions, in the right scapular region. These were given twice weekly for 30 injections. The temperature soon fell and remained at normal, the patient increased in weight, sleep became natural, and all the symptoms gradually disappeared. After six months' treatment she was quite well. The author suggests that there are certain conditions which are benefited by an increase of sodium chloride, and thinks that the sea-water treatment is worthy af a more extended trial in such cases.

Wassermann's Reaction in Children.—Francioni and Menabuoni (The British Journal of Children's Diseases) after practicing this reaction in many cases, found it positive in the first few days after birth before objective symptoms were present. It was invariably positive in hereditary lues and continued so for many years, being little affected by treatment. It had, however, a limited value as proof of indirect hereditary influence on the offspring. They cautioned against regarding a positive result as an absolute indication for active treatment, since the reaction remained positive after repeated and energetic treatment.

Spolverini asked if the authors had practiced the cuti-reaction to tubercle when they had found Wassermann's reaction positive in children under one year without symptoms of syphilis. It had been asserted that in syphilitic adults the cuti-reaction was more marked than in those suffering from tuberculosis.

Cacioppo had found Wassermann's reaction positive in children with clinical symptoms, but not constant during the period between birth and the appearance of these symptoms—a period of the greatest importance as regards early diagnosis and prophylaxis.

Francioni, in reply, said he had made no special observations as to the relation between Wassermann's test and the cuti-reaction.

Oil of Camphor in Purulent Peritonitis.

Notwithstanding the great progress which modern surgery has made in the treatment of abdominal disease and the prophylaxis of peritoneal infection, purulent peritonitis remains, when once established, a very deadly malady. It is especially when acute disease of the vermiform appendix has been treated with insufficient promptness that this fatal complication remains familiar to surgeon. Hence suggestions are heard from time to time urging the use of chemical agents, as well as saline irrigation and flushing of the peritoneum, which so often proves insufficient. Dr. Krecke, of Munich, recommends oil of camphor for this purpose and claims excellent results. He treated with complete success eleven cases of acute general purulent peritonitis, all resulting from perforation of of a sloughing appendix. The time which elapsed between the development of peritonitis and the application of oil of camphor to the peritoneal cavity ranged from eight to eighty hours; the age of the patients from ten months to seventy years. The abdominal cavity was quickly opened, the appendix amputated, the pus wiped away, and then 100 Cc. of a one-per-cent sterilized solution of oil of camphor was poured into the peritoneal cavity. It was carefully distributed over the whole area of the peritoneum by means of gauze sponges, etc. Then the abdominal cavity was closed and a rubber tube holding a strip of gauze placed in the wound.

Dr. Krecke advocates the use of oil o

camphor as a prophylactic measure in all abdominal sections where the peritoneum is already infected. He read his report on the treatment of his eleven cases at a meeting of a medical society in Munich last winter. In the discussion which followed, Dr. Schlafli stated that very strong solutions are in use at Basle. Professor von Heriff introduced from 30 to 50 Cc. of 10-per-cent solutions of oil of camphor into the peritoneum in 53 cases where the peritoneum was infected before operation. All but one case recovered. Dr. O. Burckhardt has proved that streptococcal infection of the peritoneum in white mica after injection of oil of camphor seemed to be completely neutralized, although other infected mica not treated with the oil died rapidly with all the symptoms of fulminating peritonitis. —British Medical Journal.

Salvarsan in Malaria.—Iversen And Tuschinski (Deutsche Med. Wochenschrift) have investigated the action of salvarsan upon the malarial parasite. The first report was based upon five cases of tertian fever, in which they had given 0.4 gram of salvarsan intravenously with excellent results. In the present report, the authors summarize their experience in 61 cases, presenting a great variety of malarial affections in persons of various nationalities. The remedy was given intravenously, as well as by the combined method; namely, by following the intravenous injection two days later by an intramuscular injection of an alkaline solution. The dose given intravenously was usually 0.5, while intramuscularly 0.3 was injected. The following conclusions were reached by the authors as the result of their experience: Salvarsan, when introduced in a single dose of 0.5 intravenously, produces a specific action upon every variety of malarial parasite. In tertian fever, the parasites usually disappear after from 12 to 48 hours. The attacks cease. It is impossible to say, however, whether or not this effect is permanent. It is best to combine the intravenous administration of salvarsan with the intramuscular. In quartan fever the action of the remedy does not last, even after a dose of 0.8 gram. In the tropical form, doses from 0.5 to 0.8 can only produce a temporary disappearance of the ring-forms from the blood. The crescent form does not disappear, although it may become temporarily modified in shape and staining properties. In some cases of tropical malaria, a so-called contrary effect was noticed. After a temporary lowering of the temperature, a diminution or complete disappearance of the ring-shaped parasites from the blood, there takes place a distinct turn for the worse in the patient's condition, with a reappearance of rings and crescents in large numbers.

Egg-Albumin and Glucose Test Meal.—Loeper (Le Progres Medical) advocates a test meal consisting of two hundred grams of 30 per cent. mixture of coagulated egg-albumin with 10 per cent. of glucose. This has a volume of 250 c.c. and contains exactly eight grams of albumin, twenty of glucose and two hundred and ten of water. Its molecular contraction is 0.83. Even by extracting with the aid of wash water, titration of the sugar readily allows an estimate of the amount of the test meal remaining in the stomach. The stomach contents are evacuated at the end of twenty-five minutes, when the total quantity should be about 80 c.c., and the molecular concentration reduced to 0.60. The rapidity of the latter change corresponds to the gastric circulation, being slow in cases of weak heart and low arterial tension and vice versa. Various tests, some quite analogous to those commonly practiced, others of a more recondite nature are made. In ulcer, 1 gram of albumin remains; in hypochlohydria, 7 grams: in cancer 6 grams; in cancer with pyloric stenosis the same—in typic cases.

The Surgical Treatment of Intra Cranial Growths Considered with Reference to the Expectant Therapy.—Horsley (Neurologisches Centralblatt) says that if one considers the experience of the last 20 years gained in the practical treatment of brain tumors, one sees plainly that a reconsideration of the entire subject must be undertaken. The difficulties of diagnosis and localization of the lesion have placed this subject at the present time in the false position which appendicitis occupied 15 years ago. Up to within a few years ago the majority of cases of brain tumor died without, in reality, receiving any treatment. There is no medicine known which has the slightest influence upon neoplastic tissue. Since only death is to be expected, without actual surgical treatment, the expression "expectant" therapy according to the author's opinion, bears the stamp of cruelty. As the first step in the direction of reform one must acknowledge that the so-called "expectant" treatment in brain tumor cases is false, because it is absolutely useless. In recent times it has been customary, even though the existence of a growth is presumed, to wait until the last stage of the disease appears and the symptoms of the brain pressure, choked disk, headache, and vomiting occurs. He holds this procedure to be as unjustifiable as if one in a case of carcinoma would always wait until the symptoms of glandular infection appeared.

It is necessary that neurologists should have a clear understanding as to the pathological conditions which ought to be regarded as grounds for surgical treatment. The signal conditions can be best discussed in the consideration of what Hughlings Jackson termed the two-fold division of neurological phenomena, namely, excessive activity and retarded activity of the central nervous system. Excessive activity concerns the irritative effect of the lesion. With reference to the latter, every case of localized epilepsy, which is not clearly of idiopathic origin, must be treated by operation; a simple exploratory operation can be undertaken without danger to the patient and since the successful treatment of a malignant tumor depends entirely upon its early removal, there can be no intelligent opposition raised against this proposition. The retarded activity of the central nervous system has to deal with the destructive effect of the lesion. The second proposition is, therefore, that every case of progressive motor or sensory paralysis of intra-cranial origin should be treated by exploratory operation. Also every case of a definitely recognized brain tumor must be treated according to its localization, either by the removal of the growth or through the reduction of the intra-cranial pressure. The logical conclusion should be the following, except where with the extirpation of the tumor an important function, such as speech, is destroyed; total extirpation of the neoplastic tissue the rule and simple decompression the exception. This point must be emphasized. Since because of the ease with which blindness and other pressure symptoms may be relieved by a simple decompression operation, the danger is present that the palliative operation will be utilized instead of the curative total extirpation. There are only two conditions where a palliative operation is justifiable. These are cases where one knows that the growth lies in a spot which is inaccessible or where no localization is possible. In both cases the performance of subtemporal decompression is the best procedure. In most all cases of brain tumor the question arises whether anti-syphilitic treatment. should be administered in the beginning and if administered, how long ought it to be continued. The author's opinion on this point is that where an anti-syphilitic treatment has been given for six weeks and a marked improvement has not occurred, then the case should be surgically treated. Another important point to be considered is whether our present manner of treating intra-cranial syphilitic disease is sufficient. This question was originally propounded by Sir William Gowers. He called attention to the fact that a syphilitic lesion of the encephalon was not fully healed, although marked improvement took place after the administration of anti-syphilitic treatment and that after a period of cessation the symptoms again appear. The relative incurability of cerebral lues indicates that the time has come to introduce energetic measures, and particularly so since Ehrlich has demonstrated that the severe symptoms of the first infection can be quickly relieved through an arsenic injection, but that the good effect of the injection fails when the disease has attacked the brain. The writer proposes in syphilitic pachymeningitis, both acute and chronic, and the so called syphilitic neuritic optica a new method of treatment. The author calls attention to the similarity between the subdural spaces and the peritoneal cavity. Also the necessity for bringing as large doses of mercury as possible quickly in contact with the syphilitic virus. The Dr. has treated cerebrospinal lues where the customary treatment had failed with the best results by opening the subdural space and irrigating it with a corrosive sublimate solution of 1 to 1000. Since a gumma is composed entirely of a necrotic infected mass Horsley considers it as important to be curetted thoroughly as in a similar tubercular lesion. He has practiced these procedures in all conditions of syphilitic disease of the brain with excellent results, except in two cases, both hemorrhagic in character. The first one had a great hole in the dura filled with a blood clot, and the pressure from this clot had existed too long for the brain tissue to recover itself. In the second case the hemorrhage had already penetrated the ventricle. He concludes by emphasizing the great benefits to be derived in all syphilitic diseases of the central nervous system by the opening of the sub-dural space and its thorough irrigation with a 1 to 1000 sublimate solution.

Influence of Salicylates on Thyroid Activity.—Waller (British Medical Journal) in order to prove his contention that salicylates have a powerful influence against thyroid activity gives three cases for example. For instance a robust adult had an acute tonsillitis. He had stuck to his work for three or four days when Waller first saw him one morning. He had then taken to his bed with a pulse-rate of 120 and temperature 102 F. He had headache and aches and pains in the limbs severe enough to suggest rheumatism, but possibly only influenzal. He was given a mixture containing 15-grain doses of sodium salicylate and ½-grain doses of compound tincture of cinchona. But owing to variations in the size of the domestic tablespoon, he repeatedly took a larger dose, roughly, 20 grains of salicylate and 40 minims of bark, every four hours. He then had a (morning) pulse-rate of 48 and temperature of 96.4 F. He had sweated profusely the first night, and his bowels were obstinately constipated, resisting strong doses of aperient. The pulse and temperature remained at this low level all the next day, and the bowels were still obstinately constipated in spite of aperients, though the salicylate mixture had been left off. Thyroid, 2½ gr., twice a day, was then given for two days, and the temperature again rose, this time to nearly 101 F., and the pulse to 98. The throat progressed rather slowly in spite of energetic antiseptic treatment which had given excellent results in other cases. The patient returned to work twelve days after the author first saw him, when in spite of full doses of strychnin he had a very soft dicrotic pulse of 76 and a blood-pressure of only 100 mm. mercury.

State Board Examination Questions of Mississippi.

ANATOMY.

1. Explain bone development and give examples.
2. Describe hip joint, naming its ligaments.
3. Give origin, course, and distribution of third cranial nerve.
4. Fame the preaxial muscles, giving the insertion of any one of them.
5. What constitutes the lymphatic system, and how connected?
6. Locate the emissary veins and give clinical importance.
7. Name abdominal viscera wholly covered by peritoneum.
8. Give nerve and blood supply of the rectum.

PHYSIOLOGY.

I. Describe the sounds of the heart and give causes.
2. Describe and give function of the Haversian canal.
3. Discuss (a) emulsification and (b) saponification.
4. Discuss fully rigor mortis.
5. Discuss minutely the excretion of urine.
6. Give the secretions of the alimentary canal, give the reaction and active principles of each one.
7. Discuss fully respiration.
8. Give function of adipose tissues.

CHEMISTRY.

1. Give the chemical formulæ of the following substances: (a) Iron sulphate, (b) hydrocyanic acid, (c) corrosive sublimate, (d) zinc sulphate.
2. What test would you use or employ to determine the presence of organic matter in drinking water?
3. In what combination is phosphorus found in nature?
4. Give antidote for corrosive sublimate, and explain its action.
5. Give the name and general physical and chemical properties of the halogens.
6. What physical actions have a tendency to decompose compound substances?
7. Name four chief elements entering into the formation of organic compounds.
8. In testing urine for sugar explain the reaction where Haines' solution is used.

MATERIA MEDICA.

1. Give source and uses in medicine of ichthyol.
2. Give the official name, composition, and usual dose of Fowler's solution and Donovan's solution.
3. Name the two alkaloids of opium usually used, and give doses. Also name and give doses of two derivatives of morphine.
4. What active principles are found in digitalis? Name the official preparations and doses; and say in what conditions digitalis is contraindicated.
5. Give hypodermic doses of the following: Strychnine sulphate, atropine sulphate, nitroglycerin, physostigmine; and compare the therapeutic uses of atropine with nitroglycerin.
6. Give the common name, therapeutic uses, and dose of sodium sulphate.
7. Name the principal alkaloid and official preparations of aconite, and state their doses, and give physiological action, and name conditions that contraindicate the use of aconite. Name antidotes.
8. Give source, dose, and indications for salol, and name the drugs it is subdivided into after administration.

PATHOLOGY.

1. What conditions might cause cyanosis of the face, jugular pulsation, and general anasarca?
2. What is the pathology of suppurative inflammation, and of plastic inflammation?
3. What is the pathology of a decayed tooth (physiological)?
4. What is the gross pathology of arthritis deformans?
5. Give pathological characteristics of medullary type of carcinoma of the breast.
6. Enumerate the pathological sequences of diphtheria.
7. Give gross pathology of endocarditis and mention most frequent causes.

8. Describe step by step the process involved in simple inflammation.

SURGERY.

1. Name all the agents employed for the production of general and local anesthesia, and give treatment for overdose of each.
2. Name in order of their virulence the bacteria of suppuration.
3. Name all the conditions requiring trephining, and describe the operation.
4. Give symptoms and treatment of psoas abscess.
5. Describe an osteoclast, and give indications for its use.
6. Give a clear description of a perineal prostatectomy.
7. Give cause and treatment of esophageal stricture.
8. Describe paracentesis tympani, and give indications for the procedure.

OBSTETRICS.

1. Describe methods to determine position of the fetus previous to labor.
2. State the danger to the cord in the various stages of labor and describe the methods of overcoming these dangers.
3. For what conditions and at what periods of time should Cæsarean section be performed?
4. Name four causes of dystocia with treatment of any one form.
5. Describe delivery in a case of breech presentation requiring the application of forceps.
6. Define involution and subinvolution.
7. What are after-pains? State their cause and give treatment.
8. Name the fetal evelopes from without inward.

HYGIENE.

1. What are the reasons for abolishing the common drinking cup?
2. Name and describe three intestinal parasites, and how would you prevent infection by each?
3. What hygienic instructions should be given to patients with tuberculosis?
4. What are the principal adulterations of milk?
5. Describe in detail the methods of transmission of yellow fever and malarial fever.
6. Give period of incubation, time for quarantining and mode of disinfecting after five diseases.
7. When should persons who have been infected with gonorrhea or syphilis be permitted to marry?
8. Differentiate between endemic and epidemic diseases.

Neurotic Anorexia.

While loss of appetite and nausea are usually symptoms of a host of diverse pathological conditions, they sometimes constitute a disease in themselves—a kind of neurosis. In these cases the physician will find Gray's Glycerine Tonic Comp. of almost specific value for restoring the impaired appetite. It is not only agreeable to take, but produces its benefits at once in such a natural way that before the patient realizes it, the normal amount of food is being taken. Its efficacy in these neurotic cases makes Gray's Glycerine Tonic Comp. exceedingly useful in relieving the severe nausea that often occur in early pregnancy.

Winter Colds.

There is nothing that will remove a tendency to colds (nasal catarrhs, bronchitis, laryngitis) more quickly and satisfactorily than a course of treatment with Gray's Glycerine Tonic Comp. Its effect is not only to promote reconstructive metabolism and thus enable the whole body to better withstand disease, but in addition, it imparts a local effect to the respiratory structures that unquestionably increases the local resistance to bacterial invasion. One thing is certain, cases of the ordinary respiratory diseases not infrequently prove intractable to all treatment until Gray's Glycerine Tonic Comp. is administered. Experience has proven this, and there are countless physicians who use this dependable tonic exclusively for clearing up their cases of pharyngitis. laryngitis, bronchitis and allied conditions.

The Appetite in Tuberculosis.

In view of the fact that hypernutrition, or so-called forced feeding constitutes one of the important indications in the treatment of many cases of tuberculosis, more than ordinary attention must always be devoted to maintaining the appetite. Unfortunately, many of these patients have an aversion to the very foods which are best adapted for repairing and resisting the ravages of the disease. It is here that Gray's Glycerine Tonic Comp. serves one of its most important purposes, by reason of its notable capacity to awaken a deficient appetite in a perfectly natural manner. It not only possesses the desirable feature of great palatability but through its tonic properties it never fails to impart just the right tone to the digestive organs. Thus the effects are so much more permanent and far reaching than are obtained from ordinary stomachics, that not only are larger quantities of nourishment freely taken by the patient, but a correspondingly increas-

ed amount finds its way to the remote tissues.

Functional Heart Diseases

Including tachycardia, palpitation, arrythmia and the conditions resulting from the use of coffee and tobacco, are promptly controlled and corrected by the use of Cactina Pilletts. Safe and free from all ill effects, the efficiency of Cactina is shown in the relief and benefit it affords.

Atonic Indigestion

Demands the most vigorous tonic treatment available. For many years, Seng has held a unique place as a gastrointestinal tonic, and under its use the most far reaching benefits are obtainable in all functional diseases of the stomach and intestines.

An Ideal Laxative

Is one that does not gripe nor give rise to reactionary constipation. Such is Prunoids, the most pleasant and reliable remedy at the command of the profession for the effectual regulation of the bowels.

The Enemy of Society.

The dynamiter is a social enemy. He is a far more dangerous person than the ordinary criminal, who offends in the domain of private well-being. The less of a common criminal, the worse he is. When in the name of "labor" the Los Angeles Times building was destroyed, the attack was against the very foundations of civilized society. If a private enemy, having a personal grudge, had attempted to take the life of General Otis, it would have been a serious crime. But an attempt to take his life for the reason that he edited his newspaper in a certain way, and carried on his business in a certain way, was an infinitely more serious matter. The freedom of the press must be preserved in this country at all hazards. It must not be thought that a newspaper building can be wrecked with dynamite because some movement or organization dislikes the politics or the economic views of the editor. Nor must it be thought that an employer's factory may be destroyed because he refuses to employ union labor, or will not permit a walking delegate to dictate to him about his affairs. It is a serious question whether capital punishment in the case of an ordinary private murder is in any way desirable. But society must defend itself against enemies who would destroy civilization as such. The anarchist who throws a bomb because he would destroy government is entitled to no mercy, whether his bomb kills anybody or not. If any man deserves to be hung, it is the assassin who strikes at the representative of public authority, or the dynamiter who attacks the fundamental conditions of economic society. For this reason, the detective, William J. Burns, has rendered our country a public service of inestimable value. Every possible effort should be continued to discover and punish everybody who may have been connected with these crimes, perpetrated in the name of a movement. The more it can be shown that the dynamiter is a fanatic, and not a crook or a criminal in the ordinary sense of the word, the more dangerous he is, and, therefore, the more necessary it is to treat him as if guilty of treason in the extreme sense of the word and tc punish him accordingly.—From "The Progress of the World," in the American Review of Reviews for January.

Pleurisy and Insurance.

Bourgy says that pleurisies, the cause of which can be established, or such as are simply complications occurring in the course of other acute diseases, in a word, non-tuberculous pleurisies, are not contraindications to acceptance for insurance, if the following conditions have been fulfilled: The cure is complete, as corroborated by freedom from signs and symptoms for a sufficient period of time. There has remained no sequel of the disease that may embarrass other organs in performing their functions. The same attitude should be adopted in regard to empyema,even though surgical interference has been necessary for effecting a cure. So-called essential or primary pleurisy, on the other hand, must be looked upon from a different point of view. It is usually due to tuberculosis, and the applicant giving a history of such pleurisy must be thoroughly examined with regard to any manifestations of tuberculosis. Personal and family antecedents, age, sex, surroundings at home, profession, habits, date of the pleurisy, etc., are the points which must be fully considered. Whenever there is any doubt it is always a good general rule to recommend postponing the acceptance of the applicant for a fairly long period of time.—Third International Congress of Insurance Physicians.

Rational Treatment of Diabetes in Hospital Practice.

Alessandrini says that since no medical treatment of diabetes has been successful in curing the disease we are obliged to depend on diet in its treatment. But in this respect we must not make any hard and fast rules to be applied to each case, since each case should be individualized, and the kind of diet must depend on the stage and cause of the disease, as well as the general condition of the patient. In the United Hospitals of Rome the ordinary hospital diet is given with the exception that sweets and farinaceous articles are excluded. It is well known that diabetics will not tolerate a diet consisting solely of meat. Carbohydrates cannot be entirely excluded from the food, and when they are removed it should be done gradually. After the carbohydrate tolerance has been established and sugar has disappeared the carbohydrates can only be returned to gradually. The three objects to be attained in treatment are to cause glycosuria to disappear, to prevent acidosis, and to avoid loss of weight. The last is not as important as the other two considerations. The diet should be such as to keep just below the limit of tolerance for carbohydrates. When the removal of carbohydrates does not stop the glycosuria we must lessen the amount of albuminoids, removing the meats and substituting vegetable albumins. An increase in weight is an indication of the good results of treatment. The amount of albuminoids given should never exceed 150 grams per day. As substitutes for sugar, inosite, mannite, and cellulose are all well tolerated. Alcohol is well tolerated and is of great value in diabetes. The daily dosage of sugar, the determination of the weight of the patient, the examination of the nitrogenous metabolism and the amount of ammonia in the urine are the guides in determining the number of calories to be given in the diet of diabetics.—Rivista Ospidaliera.

Salvarsan and Labyrinthine Troubles.

Felix cites many cases treated with 606 in which there have been ear troubles more or less severe. He advances the question whether these troubles have been due to the use of salvarsan, or have occurred in spite of its use as a result of the syphilitic virus. There are cases in which the auditory symptoms existed before the use of salvarsan and others in which the labyrinthine troubles followed the use of the injections. Ehrlich believes that these symptoms are only a recurrence of syphilitic manifestations and not due to the use of arsenobenzol. The author concludes that in order to avoid auditory troubles we should make a very careful examination of the acoustic organs of every patient who is to be injected with salvarsan, and should exclude from treatment all cases that present auditory troubles, treating these cases with mercury.—La Presse Medicale.

Alcoholism and Pregnancy.

Gentili and M. Cambazzu made an experimental study of the effects of alcohol on pregnancy. They injected animals with alcohol intravenously and subcutaneously, and found that this drug caused prostration in the mothers and feebleness and lack of resistance in the offspring, which soon died. There were functional and organic changes in the chief internal organs of the poisoned animals. Pregnancy generally went on to full term, but sterility was caused by the continued injections in cases not yet fecundated. Pregnant animals were more seriously affected than the non-pregnant. Abortion was not caused by alchol, but in some cases the fetus was killed. Probably in the human race a degree of immunity to alcohol has been conferred by generations of alcoholic indulgence.—Annali di Ostetricia e Ginecologia.

The Magic of Dickens.

From Harold Begbie's "Dickens's Characters in Real Life" in the January Century.

The hundred years which have rushed over the earth like an express train since Charles Dickens felt the first pinch of a terrestrial winter have changed the human mind, altered the attitude of the soul to the universe, and modified the affections of the human heart. We are no longer easily moved to tears, we are loath to let exaggeration filch our laughter, we are perhaps less eager than our forefathers to be made to smile, and certainly more avaricious with our tears than were our grandmothers. Nevertheless, the magic of Dickens still touches our lives, and the manhood of the whole Anglo-Saxon race is colored by those ensorceled hours of our boyhood when we roared with Sam Weller, hated Jonas Chuzzlewit and Carker, loved Little Nell, trembled at Quilp, fancied ourselves Nicholas Nickleby, envied David Copperfield, longed to possess a Grip, loathed Pecksniff, and felt our hearts grow heavy over the bitter sufferings of Oliver Twist, Poor Jo and tragic Smike.

Gypsum and Varicose Ulcers.

S. Diossijilagyi has employed the method recommended by W. Pust in the treatment of varicose ulcers of the legs, and has met with much success, On this system a thick layer of gypsum is placed over the site of the ulcer, seperated from it by a thin gauze bandage; over the gypsum is placed a thick layer of cotton wool, and the whole covered with gutta-percha, Billroth cambric or similar material. No sterilization of the gypsum is needed. During the first days the gypsum and cotton wool are often changed without changing the gauze. As soon as the ulcer becomes clean the following ointment can be substituted for the dressing: Argenti nitatis cryst, 0.30: balsami peru viani 3.0; zinci oxidi, 2.0; petrolati 30,0 Pust maintains that under such treatment obstinate ulcers become clean often within a few hours, and that wounds received under unfavorable conditions, such as the wounds of enginemen or navvies, remain sterile. The author has tried the treatment in fourteen cases of varicose ulcer of the leg during eighteen months. His experience has been that even in obstinate casess in which the ulcer has spread in spite of treatment and has caused continual pain, there has been immense improvement within twenty-four hours. Foul smell has disappeared as a result of absorption of gases by the hard porous mass formed by the action of the secretion from the wound on the gypsnm. The ulcer cleaned up on the second day, edema of the edges diminished, and, what was of even greater importance to the patient, pain also diminished. At the same time secretion became less, so that the dressing could be left in position much longer. as a rule, the change to ointment could be made in from five to ten days, according to the rate of progress. Not one of the fourteen cases proved resistant to the treatment. The author also treated two cases of broken down boboes with gypsum, but substituted for the ointment a daily irrigation with 3 per cent. H_2O_2, and the result in these cases was as satisfactory as in the others. The gypsum acts by drying up the wound and so making the conditions unfavorable for bacterial life. and at the eame time causing increased circulation locally and providing more favorable conditions for the tissue cells.—Brit. Med. Jour.

The Treatment of Cleft Palate.

The features of the discussion on the treatment of cleft palate at the May meeting of the Royal Society of Medicine were the sharp conflict of opinion on the age at which to operate, and the general acceptance of Langenbeck's operation in preference to those devised by Lane and Brophy. Lane stated that he operated as soon after birth as possible— (1) in severe cases to save life, and (2) to obtain sufficient air-pressure in the naso-pharynx during respiration to enable the naso-pharynx and surrounding bones fully to develop as they do in a normal child. He said that only a fraction of the severe cases survived to come to operation at four to six years. The more serious the case, the earlier in life it shoud be operated on. In the first few days of life those babies were at their best. Many clefs could only be closed early, as the encroachment of the teeth on the gums deprived the flap of about two-thirds of its breadth. The mortality of 5·9 per cent. with his "turnover flap" operation was surprisingly small considering the desperate state of many of the children on admission.

The strongest opponents of early operation were Johan Ulrich, of Copenhagan, and James Berry. The former stated he had found it more difficult to obtain healing at the age of two or under, and in future he would prefer to postpone operation till the age of three years. Berry said he considered early operation the very reverse of life-saving. If emaciated children with a wide cleft ware properly nursed by mother or nurse, he did not find that many of them died. The period of choice for the operation in the difficult cases was at two years, but there were many cases with narrow clefts which could be advantageously operated on even in the first year of life. In his serious of 144, no death had occurred. Several of the speakers pointed to the abscence of statistics showing that the mortality in children with cleft palate not operated on was greater than in ordinary children of the same class.

The chief criticism directed against Lane's "turn-over flap" operation were;—That the operation is dangerous in young infants (Spencer, Drew); that the soft palate tends to become thin and cicatrical, and the power of articulation poor (Ulcrich;) that the palate may be too stiff (Ulrich); that there was much scar tissue, the palate was crooked, and when the children spoke there was a drawing up on one side (Kellock); taat atrophy of the flap occasionally occurred, sometines so extensively that further operation was impossible (Berry). Brophy's operation was condemned for its severity by Ulrich and Berry. Ulrich also said that after Lane's and Brophy's operations the teeth were often almost ruined.

The question of prothesis treatment in wide clefts was discussed by Ulrich. In most of the severe cases operation was followed by poor power of speaking, and in some the palate had required to be again split to apply a prothesis. On the other hand many adults with a wide cleft spoke very well, almost excellently, with a properly fitting prothesis. Out of 56 cases he thought that 10 would have done as well without any operation.

Sixty patients were shown at the meeting, and the consensus of opinion was that the results as regards speech were very disappointing. G. E. Waugh dwelt particularly on this aspect. He said that only one of the patients shown did not betray by his speech that he had been the victim of cleft palate. It did not matter whether the operation was done in infancy or slightly late, or whether the original defect was slight or gavee. Even if the structure and mobility of the palate were perfect, the child might speak as if it had no roof to its mouth and no mobile palate. In all probability there were two lesions to consider—one in the function of the speech centres, and one in the structure of the palate—and they were associated but not interdependent. Surgeons could claim no more than that operation would allow of breathing through the normal passages, and of swallowing in a fairly normal manner.—Edinbough Medical Journal.

Dr. Charles E. de M. Sajous.

SUPERVISING EDITOR OF THE NEW YORK MEDICAL JOURNAL.

We have the honor to announce that beginning with issue of December 9, 1911, Dr. Charles E. de M. Sajous, of Philadelphia, became the Supervising Editor of the New York Medical Journal.

Though born under the American Flag, Doctor Sajous received his preliminary education in France. He studied medicine in Philadelphia, graduating with honors from the Jefferson Medical College in 1878. He served for two years as resident physician in the Howard Hospital, and in 1881 was appointed professor of anatomy and physiology in the Wagner Institute of Science, lecturer in the Philadelphia School of Anatomy, and clinical assistance in the laryngological department of Jefferson Medical College, succeeding Dr. J. Solis Cohen, in 1883, as clinical lecturer and chief of that department. In 1891 Doctor Sajous went to Paris, where he devoted six years to original research. Upon his return, he was appointed Dean of the Medico-Chirurgical College. At the recent reorganization of the medical department of Temple University Doctor Sajous accepted the chair of pharmacology and therapeutics, which he still holds.

The immediate outcome of Doctor Sajous's six years of research work in Paris was the publication of two volumes on Internal Secretions and the Principles of Medicine, a work which gave the author high standing as an orgininal investigator.

Doctor Sajous has had a wide editorial experience, having founded in 1888 the Annual of the Universal Medical Sciences, which he conducted with the collaboration of some of the most eminent physicians in America and Europe, until the publication of over 500,000 volumes and the Cyclopædia of Practical Medicine, founded by Doctor Sajous in 1898, to succeed the Annual, and intended more particularly for the general practitioner, has attained a circulation of 24.000 volumes, the seventh edition being now in course of preparation.

The value of Doctor Sajous's services to medical science has been recognized in France by his being made a member of the Legion of Honor, while in Belgium he received the order of Leopold and was made a Knight Commander of the Liberator, besides receiving other titles, both governmental and scientific. In America Doctor Sajous has been president and vice-president of many societies and is a fellow of the College of Physicians of Philadelphia, and of the American Philosophical Society. He brings to bear on the editorial problsms of the New York Medical Journal a brilliant and well informed mind, wide experience, and a thorough knowledge of the needs of the American physician.

The publishers of the New York Medical Journal feel that they as well as its readers are to be congratulated upon having obtained the services of Doctor Sajous, Comprehensive and directed plans have been formulated for enhancing the value and interest of the New York Medical Journal, and in carrying out these plans no pains or expense will be spared to give to our readers a medical journal of unprecedented authority and interest.

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The Value of Medicopedagogical Treatment in the Care of Moral Anomalies.

Paul-Boncour says that there can be no doubt of the efficacy of the methods initiated by Seguin of treatment of mentally defective children. Every day the excellent results of this treatment are seen. But in cases of moral anomalies there is some question as to the value of committing such children to an institution with a certain hope of cure. The author believes that we shall get good results in those cases in which the moral anomaly is coincident with lack of mental development, but that in cases of moral anomalies in minds that are normal this treatment is liable to fail. Moral sentiments are not lacking in the mentally defective, they only require development and education; as their motor hyperexcitability is lessened and they become less unstable and impulsive their moral sentiments are increased, they learn to know good from evil, and to think about the results of their acts. There are congenital perversions of morality that do not result from intellectual insufficiency, and these children, while benefited by the regulation of habit, are not cured by it. They are true moral idiots. The creation of institutions for the treatment of young criminals is not goihg to be the solution of the problem of prevention of crime in all cases. Every case must be individualized and studied by itself.—Le Progres Medical.

Tuberculin Treatment.

The opinion now is that tuberculin acts in two ways: (1) By giving rise to immunization processes and (2) by causing the so-called area reaction—but the relative value of the two processes is still in dispute. The estimation of the sensitiveness of tuberculin by the reaction to von Pirquet's and the ophthalmic test in tuberculous patients does not, in the opinion of Sorgo and Suess, form a guide to prognosis, nor does the sensitiveness, as shewn by the extent of the general reactian. In patients, however, who have already had large doses of tuberculin, a sudden rise in sensitiveness to tuberculin seems to be of unfavorable prognosis and there is often a lasting intolerance to tuberculin and a rapid progress of the disease. There does not seem to be any constant relationship between the intensity of the area reaction and the intensity of the reaction to von Pirquet's or ophthalmic test. The two great methods of administration of tuberculin are those of the repeated administration of minimum doses, the anaphylactizing method and the administration of gradually increasing doses —the immunization method.

Until recently the latter method was practically the only one in use, and whatever may be the theoretical objection to it, it has proved practically useful. The other method is now frequently employed, Escheric has found it especially suitable for young children, and it is often the only possible method, because the patient can not bear any increase of the dose. The form of tuberculin administered does not seem in most cases to be of great importance if the precaution of using the more toxic forms only in large dilution is taken. T. R. and tne bacillary emulsion are, however, the forms best borne by patients with fever, while if Bandelier's observations be correct, bacillary emulsion may be harmful in laryngeal tuberculosis, and should be employed only with caution. An initial dose which may be tried by inexperienced persons is 0·000001 gram, or 0·00001 gram. With experience the operator may in suitable cases begin with a larger dose 0·0001 gram. The severity of the cutaneous reaction is of some service in fixing upon the initial dose, but taken alone it does not give a certain indication as to how much tuberculin will be tolerated, if however, a cutaneous reaction is present when a small

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dose is given and absent when the same dose is repeated, the dose may be safely increased, while in cases of excessive cutaneous reaction it is perhaps advisable not to increase the dose. Small hæmorrhages from the lungs do not absolutely contra-indicate tuberculin treatment; nor heart affections, though when the cardiac muscle is much affected and subjective symptoms follow an injection, the treatment should be discontinued. Injections should not be given in the case of women during the menstrual period. Patients with fever, or in very poor general condition, those who are very nervous, who suffer from heart disease, or from a tendency to hæmorrhages, are to be considered unsuitable.—British Medical Journal.

The Treatment of Acne by Vaccines.—Morris and Dore (British Journal of Dermatology) give a complete review of the entire literature connected with this subject, and their conclusions based upon the experience of many leading authorities are, therefore, quite valuable.

With regard to the comparative advantages of autogenous and stock vaccines, they are disposed to agree with those who hold that the former are the most efficacious, though in some cases it is better, perhaps, to use a stock vaccine from a trustworthy source, owing to the difficulty of cultivating the acne bacillus. If the cultivation of the bacillus be attempted, it is well to inoculate not only the special media on which the bacillus will ordinarily grow, viz., acid agar, glucose agar (anaerobically), and oleic acid agar, but also human blood agar and Loffler's blood-serum. Some forms of this bacillus are peculiarly delicate, and resent change of nutriment, but in general the micro-organism will grow upon the three special media mentioned. It is well to remember that pus containing the bacillus should not be allowed to become dry, as this frequently kills the bacillus.

Some of the observers whose work was mentioned appear to attach importance to the opsonic index in vaccine-therapy. That view they do not share, their opinion being that in this connection the opsonic index may be disregarded.

Experience prevents them from claiming more for vaccine-therapy in acne than that it is a useful adjuvant of the ordinary forms of treatment. Occasionally, indeed, the condition will clear up in a remarkable manner under the administration of vaccine, but there is a marked tendency to relapse, and it is usually necessary to continue the vaccine for long periods and to reinforce it with the other measures mentioned. As an auxiliary to such measures it has a place in the treatment of acne, but there is no evidence that it is capable of inducing true immunity. When the real nature of immunization is better understood it may indeed be found that certain of the local measures that have been referred to, and especially radio-therapy and radium-therapy, bear in the process a part at least as important as treatment by vaccines.

Blood Clots in the Human Heart.

Dr. A. Welsh is able, as a result of observations on the nature and distribution of blood clots in the human heart (Journal of Path. and Bact., Vol. XV., No. 4, April, 1911, p. 467), to confirm Martin and Rennie's previous conclusions. He finds that in deaths from pneumonia or suppurative conditions firm opaque white fibrin thrombi, not embolic, but formed in situ, not adherent to the cardiac wall but entangled in its meshes, are to be found, especially on the right side. He suggests that these clots owe their formation to a greater concentration of thrombokinase resulting from the great accumulation of leucocytes, assisted by a greater CO2 content of the blood. At times a negative phase, when no clot is formed and the blood post mortem has lost its power of coagulating, is found. This may be due to the cells in the inflammatory area breaking down to a far less extent, and correspondence can therefore be seen with the well-known differences to be observed when nucleo proteids are introduced rapidly or slowly into the circulation of animals, the blood clotting (positive phase) in the former case or remaining fluid (negative phase) in the latter. It is quite possible that the clots may be formed hours or even days before death, and they are probably a cause of death rather than a result of dying.—Birmingham (England) Medical Review.

Cancer of the Stomach.

Rummo discusses cancer of the stomach, dealing fully with some of the more recent aids to early diagnosis. He points out that none of them can be taken alone as diagnostic, but in combination their value may in any given case be great. The presence, for example, of enlarged glands above the left clavicle is sometimes undoubtedly associated with gastric cancer, but the author does not believe as a sign it is of great value by itself.

Radiography is useful in helping to differentiate between medullary cancer and a diffuse infiltrated carcinoma: it may also render aid in determining whether a given tumor is truly gastric or extraventricular, according as the shadow moves with the movement of the stomach or not. The absence of free HCl, although common in cancer, is not constant and appears to depend on whether the mucosa is atrophied or not. It has been said that the presence of HCl is commoner where cancer has developed in an old gastric ulcer. The author discusses Salomon and Gluzinski's tests and the tryptophan reaction, and agrees in their usefulness as aids to diagnosis, but attaches no absolute value to them alone. Gastric cancer situated in the upper part of the stomach does not, as a rule, set up disturbances of mobiliry, which is the reverse of what happens in the case of gastric ulcer. Some clinical cases are given in illustration of the points discussed.—British Medical Journal.

The Internal Secretion of the Prostate

Lerallach and Parez (Revista de Medicina y Cirugia Practicas) have carried out, at the Municipal Bacteriological Laboratory of Barcelona, a great number of experiments on dogs with the object of ascertaining the action of the internal secretion of the prostate gland. These experiments are the continuation of a series, the results of which have already been published (Societe de Biologie, Paris, December 28th, 1907, vol. lxiii., p. 790). From these it appears that the prostate gland exercises a powerful influence upon the testicles and upon spermatogenesis. It was found that in dogs whose prostate had been as far as possible (that is, not completely) removed, the testicles atrophied, and spermatozoa disappeared from the semen. If, however, contemporaneously or previously to the removal of the gland, a portion of it was engrafted in the subcutaneous tissue of the animal, or an extract of the gland given by the mouth, these consequences were averted. It was also found that a glycerine extract of the prostate gland, injected intravenously, caused a marked testicular vaso-dilatation and spontaneous emission of semen from the vas deferens. In order to answer the objection that in these experiments the prostate was never completely removed, the authors made many attempts to devise a method of operating which would enable tpem to remove every vestige of prostatic tissue without at the same time vitiating the results of the experiment in other ways.

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The most recent fraud practiced in regard to this product is an attempt to profit by the renown of Sander & Sons. In order to foist upon the unwary a crude oil, that had proved injurious upon application, the firm name of Sander & Sons is illicitly appropriated, the make-up of their goods imitated, and finally the medical reports commenting on the merits of their excellent preparation are made use of to give the desired lustre to the intended deceit.

This fraud, which was exposed at an action tried before the Supreme court of Victoria at Melbourne, and others reported before in the medical literature, show that every physican should see that his patient gets exactly what he prescribed. No "just as good" allowed.

Dr. D. F. Holcomb, one of the best known and most popular physicians of Surry county, N. C., died at his home in Rockford on December the 15th.

Mediastinal Causes of Chronic Cough in in Children.

French, in the British Medical Journal, believes that chronic enlargement, sometimes associated with tuberculous caseation, of the lymph nodes at the bifurcation of the trachea is a cause in these cases of chronic cough. The bronchial node immediately below the right bronchus is affected far more frequently than is the node on the left side, and the right phrenic nerve is frequently seen to be displaced by the enlarged lymph node in such a way as probably to be much irritated by it and thus lead to attacks of purposeless coughing—that is to say, coughing which does not succeed in bringing up any sputum. In a certain number of cases it is possible to demonstrate the enlargement of this right bronchial node by means of the Roentgen rays. The author suggests that the attacks of coughing which are so troublesome in some heart cases are to be explained by irritation of the phrenic nerves in a similar way, by their being displaced and stretched by the dilated and hypertrophied heart. The importance of realizing that enlarged bronchial lymph nodes may be the cause of persistent coughing in children is that the enlargement is generally tuberculous, and therefore the correct treatment is to adopt the general hygiene best adapted to the relief of a tuberculous infection together with measures calculated to prevent the swallowing of more living tubercle bacilli, an end to be accomplished either by obtaining milk from cows that have been tested satisfactorily with tuberculin, or else by making sure that any tubercle bacilli in the milk have been killed by efficient sterilization, preferably by thorough boiling.

"Charles Dickens and Women."

By the late Henry Snowden Ward.

The recent sudden death in New York of Mr. Henry Snowden Ward, the distinguished Secretary of the Dickens Fellowship in England, is as sincerely deplored in America as in the land of his birth. His delightful lectures on Dickens and Shakespeare have been popular literary features of this season; and one of his latest acts was the preparation of an illuminating article for Lippincott's Magazine on "Charles Dickens and Women," which will be published in February when the Dickens centenary is due.

Reducing Suceptibility to "Colds",

The annoyance of colds that follow atmospheric changes, even of a mild degree, impress the susceptible individual with the need of improving his bodily vigor so that he will be better able to resist them, and he frequently comes to his medical attendant in search of measures that will accomplish this. Many employ the Cordial of the Extract of Cod Liver Oil Compound (Hagee) for this purpose, owing to its well known power to add strength and resistance to the lining membranes of the respiratory organs, thus enabling them the better to combat microbe attacks. In inflammation of these organs Cord. Ext. Ol. Morrhuae Comp. (Hagee) has power to be of the utmost service, as it has, also, in their prevention.

Puerpera Psychoses.—Lucien Picque distinguishes among psychoses connected with pregnancy and the puerperal state between febrile states accompanied by delirium, which he considers to be always due to an infection of the uterus of more or less degree of severity. and the afebrile one. The febrile cases should always indicate an evacuation of the uterus and should be treated only in a hospital where surgery is done and not in an asylum. The uterine wound should serve as a line of separation between the psychoses of pregnancy and of the puerperal state. While there must always be a predisposition to mental trouble, still it is the results of infection that make the condition incurable. If the uterus is early excuated one may get a cure but if the condition of infection becomes chronic there shall get changes in the brain cells that will render the condition permanent. In the apyretic forms we generally observe meloncholia; in the febrile forms confusion, hallucinations and maniacal attacks. The apyretic forms should go to an asylum. the febrile to a surgical hospital.—L'Obstetrique.

Radium Therapy for Syringomyelia.

—Duhain has treated cases of syringomyelia by means of radium emanations, and has come to the conclusion that the method is of considerable value. Muscular weakness and tactile anæsthesia, he states, soon become lessened, and later on sensibility to pain becomes restored. Restitution of temperature sense usually remains imperfect, but as a rule deep sensibility and the stereognostic sense become improved. Spontaneous pain often persists in spite of the treatment, but vasomotor and trophic disturbances rapidly disappear. Atrophic muscles, however, do not seem to improve. —Archiv. d'Elect. Med.

The CHARLOTTE SANATORIUM

LABORATORY-DEPARTMENT

CHARLOTTE, N. C.

The Main Building Front View.

The attention of the physicians and surgeons is called to the advantages which this institution offers in methods of laboratory diagnoses.

Many physicians through lack of time, technical training or laboratory equipment find it difficult to utilize the many methods of microscopic and clinical examinations so essential to a proper diagnosis.

To the physicians and surgeons of the Carolinas and Virginia, the Charlotte Sanatorium Laboratory offers, at moderate cost, facilities for such examinations. Animal inocculation, chemical, bacteriological and histological examinations will be made as the case requires.

The following directions are suggested for the benefit of those who may forward material for examination.

All specimens should be accompanied by a brief note descriptive of the clinical condition and a special reference to the character of the examination desired.

Seventh Street Entrance.

The name and address of the person to whom the report is to be sent should be clearly indicated.

Sputum—should be sent in a clean, wide-mouthed bottle. The ordinary vaseline bottle answers all purposes. The morning sputum is preferable. That expectorated during meal time should not be included.

Blood For Widal Test.—After carefully washing, prick the lobule of the ear or the tip of the finger. The first drop of blood should be wiped away. Two large drops are then placed on a glass slide, one near either end, and allowed to dry without being spread out on the suface of the slide. After they have dried, the

slide is carefully placed in a clean envelope and box, and then mailed to the laboratory.

Second Method.—Collect three or four drops of blood in a capillary tube; then seal tube over gas or other flame and send to the laboratory. (Capillary tubes will be sent upon application to the laboratory.) Blood for malarial parasites differential count. etc., should be sent to the labaratory on glass slides. As thin a smear as possible should be made.

Smears For The Detection of Gonococci.—One drop of purulent discharge from the urethra should be placed at one end of a clean slide and a thin smear made overthe surface of the slide.

Clinical Laboratory, Showing Arrangement of Desks, Miscroscopes, Microtomes, Incubator, Centrifuge, Etc

In collecting a specimen from a female patient,care should be taken to obtain the drop of material directly from the seat of the discharge. This should be done with a sterile swab or other instrument. Two smears should always be sent to the laboratory.

Urine.—for bacteriological examination should always be catheterized directly into a bottle that has been rendered sterile by boiling 15-20 minutes. No chloroform or other preservative should be added. When sending a specimen of urine to the laboratory, always mark it with the date, the name of the patient and of the physician for identification, and specify whether a chemical or bacteriological examination, or whether Ehrlich's diazo test for typhoid fever is desired. The quantity should not be less than four ounces.

Clinical Laboratory, Showing Autoclave, Hood, Operating Tables, Etc.

Pathological—material from either operation or autopsy should be wrapped in gauze moistened with salt solution surrounded by oiledpaper or rubber protective. When it is not possible for material to reach the laboratory within tweuty-four hours it should be placed in alcohol (80 per cent) or formalin solution (10 per cent.) Small fragments of tissue and thematerial from uterine curettage should be preserved always.

Tumors.—can be sent by mailing in wide mouthed specimen jars. They should rest upon a pad of absorbent cotton, which is placed in thebottom of the jar before

the tumoris dropped in.

Feces.—should be sent in a clean, wide mouthed bottle. A large sterilized screw capped bottle will answer the purpose.

Wassermann's Test.—Since the advent of the discovery of 606 for the cure of Syphilis. the employment of the Wasserman test, both before and after its use, is conceded by all scientific investigators to be of the highest importance as a control to the curative effect of this remedy. The Charlotte Sanatorium Laboratory is specially equipped for carrying out this Wasserman Sero-diagnosis test for Syphilis.

(Clinical Laboratory, Showing Supplies, Working Table. Etc.)

Specimens sent to the laboratory for this test should be obtained as follows.

1st. By using an ordinary antitoxin syringe, and withdrawing the blood directly from the median basilic vein, as represented in Fig. 1 illustrates tourinquet applied, taken the blood from the vein by means of the syringe

Clinical Laboratory, With Hot Air Sterilizer, Scales, Lavatory, Etc.

2nd. By means of capillary attraction, as illustrated in Fig. 11 represents empty capsule; tourinquet applied to finger. It is best to apply constriction to middle finger, and puncture the dorsal surface of the last joint of this finger rather close to nail with a sterile, and collect blood, as illustrated in Fig. 11.

After obtaining blood if capsule is used, as is shown in Fig. 11, simply place the curved end over a flame of a Bunsen Burner, alcohol lamp, or ordinary gas jet to seal same, and mail. If syringe or other means are employed, put blood in small test tude, allow to coagulate, cork, pack and mail as any other fraigle package. Atleast two C. C. should be withdrawn for this test. The syringe tubes, etc., should be clean and perfectly dry. It is the best, if possible, for patient to go to the laboratory and have the director of that department secure for himself the specimen of blood.

Milk.—The bacteriological examination of milk, requires certain precautions in the collection of the sample. Special instructions and proper containers will be sent upon application.

Stomach Contents.—should be sentin a sterilized bottle. Alarge vaseline or quinine bottle usually answers the purpose.

Fig I.

Fig II.

The following table gives the cost of many of the examinations made in this laboratory:

Smears and Stains (tubercle bacillus,) gonococci, etc.	$1.00
Blood.	
Hemoglobin and Erythrocytes	1.50
Leucocytes	1.00
Differential	1.50
Malarial parasites	1.00
Complete analysis	3.00
Urine.	
Chemical	1.00
Microscopical	1.00
Complete analysis	1.50
Pathological Sections	5 00
Feces Examination	2 00
Blood Culture	5.00
Cultures and isolation of bacteria	5.00
Stomach Contents	2.00
Widal Test	2.50
Tissue Sections	5.00
Tuberculin Test	5.00
Wassermann's Test	10.00
Milk.	
Chemical	2.50
Bacterial	5:00
Water analysis, bacterial examination	5.00
Chemical examination including alkalimity, chlorides, ammonia, nitrites and nitrates	5.00
Quantitative analysis	$10.00 to 25.00
Culture Media (per tube)	.25
Sterilized tubes and pipettes	.15
Coagulation time	2.50
Vaccines	10.00
Sterilized Tubes with swab	.50
Bacterial Cultures	1.00
Sterilized solution	5.00
Spinal Puncture and Analysis	5.00

Address all specimen to the Charlotte Sanatorium Laboratory, Charlotte, N. C.

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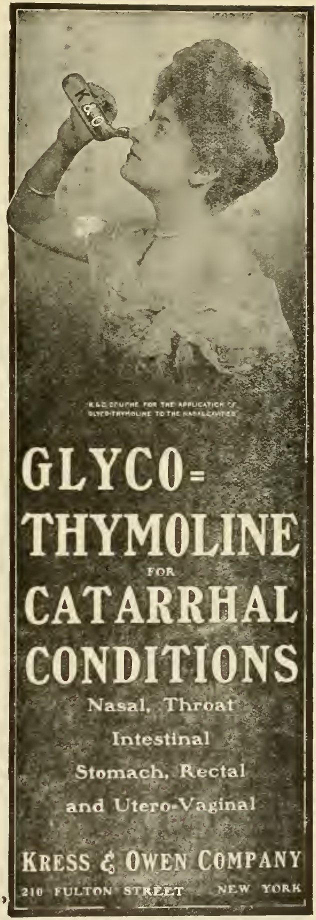
Treatment of Papilloma of the Larynx in the Young Child.

Broca and Rolando give us the results of their study of papillomata of the larynx in young children. This is a most intractable disease, since the growths rapidly occur after removal, and cause severe dyspnea and suffocation. Left alone this disease invariably goes on to asphyxia due to obstruction of the larynx, since there is no tendency to spontaneous retrogression of the growth. Tracheotomy and intubation are but temporary palliative measures and only put off the time of fatal suffocation, since the child cannot go on indefinitely wearing a tube in his throat. Death may happen by reflex inhibition of the respiration. The voice becomes permanently rough or lost. The author concludes that there is no treatment that can be recommended as certain to preserve the voice, and to give probability of non-recurrence of the disease. Whenever there is alarming dyspnea the proper treatment is tracheotomy, hoping to produce enough atrophy of the growth to allow of operation by the natural passages. The procedure of choice is extraction in this manner under control of the head mirror, and this can be done after four years of age. It requires many sittings and recurrences are probable. When extraction by the natural passages is impossible on account of the extreme youth of the patient thyrotomy must be done. Definite success by this method is very rare. After these operations stenosis may make the removal of the tube impossible.—Revue de Chirurgie.

The Satisfaction of Successful Therapy.

There is always a great and lasting satisfaction to be derived from administering a remedy and obtaining the result desired and expected. Aside from the therapeutic and more or less material benefits, the gain in medical confidence from standpoints of both practitioner and patient, is always considerabte. Few remedies have given rise so consistently to the satisfaction of therapeutic dependability as Gray's Glycerine Tonic Comp. For a good many years thousands of physicians have been using this reliable tonic, with confidence born of almost invariable success, and to say that medicine and medical practice have been benefited and strengthened thereby is not only to state the truth, but to give deserved credit to a worthy product.

"For some years there has been a tendency among the profession to use sodium salicylate to the practical exclusion of other agents in the treatment of acute articular



FORMULA:

Benzo-Salicyl. Sod. 33-33: Eucalyptol .33; Thymol. 17: Salicylate Methyl. from Betula Lenta .16: Menthol .08 Pini Pmuilionis-16: Glycerine and solvents q. s. 480.

rheumatism. Even the therapeutic nihilist has conceded to sodium salicylate the first place in rheumatism, as he accords it to quinine in malaria, or to antitoxin in diphtheria."

"The recent reports by Menzer, a surgeon in the German army, tend to discredit the too implicit faith placed in the use of the salicylates alone in acute articular rheumatism. It is not denied that the salicylates pushed to effect will alleviate the symptoms, but he asserts that cases so treated are more subject to relapse and to permanent deformity than are those in which other remedies are exhibited, and that there should be incorporated with the salicylates other agents which will not encourage injurious complications."

In Tongaline, sodium salicylate from the natural oil is combined with tonga, colchicum, black cohosh and pilocarpin, whereby the organs of elimination are greatly stimulated, so that prompt and efficient results are secured without the necessity of such large doses of the salicylates as to cause any harmful effects.

A Distinctive Piece of Literature.

"Here is something different." This is apt to be the first thought of the physician upon breaking the wrapper of Parke, Davis & Co.'s new brochure on bacterial vaccines and tuberculins. And the external appearance of the book is in no wise misleading. The "difference" applies to the printed page as well as to the handsome cover in artistically blended browns and gold. The brochure contains forty-eight pages in addition to the cover and thirteen full-page engravings in colors.

The work is divided into three parts or sections. Some of the subjects considered in the first section are: "What is the Difference Between Bacterial Vaccines (Bacterins), Serums and Toxins?" "How are Bacterial Vaccines Prepared?" "Therapeutic Action of Bacterial Vaccines"; "When Should Serums be Used, and When Bacterial Vaccines?" The second section treats of the origin and nature of the bacterins. the relative merits of "stock" and "antogenous" vaccines, the opsonic index, and the best method of using the bacterins, together with a description of each vaccine, including references to preparation, therapeutics and dose. The third section is devoted to a consideration of the tuberculins, with dilution and dose tables, descriptions and illustrations of the various diagnostic tests, etc.

Briefly stated, the booklet is a concise review of the essential facts relating to bacterial-vaccine therapy, containing precisely what the seeker after this kind of information wants. It is not padded with clinical reports—in fact, it contains none. We understand that Parke, Davis & Co. will be pleased to send a copy of this unique and valuable brochure to any physician requesting it. Address them at their home offices, Detroit, Mich., specifying the "new booklet on bacterial vaccines," and mention this journal.

The Malarial Anemic.

Whether or not the much maligned mosquito is the intermediate host of the plasmodium malariæ, certain it is that the campaign waged for this insect's extermination has not entirely ridden the country of the blood infection for which it is responsible. In addition to the chills, fever and sweating characteristic of the acute forms of the disease, which require immediate antidotal treatment, the physician must recognize the serious injury to the blood itself, due to the invasion and actual destruction of the red cell by the paludal organism. After the subsidence of the acute symptoms, a distinct aglobular anemia is the result, and unless this is corrected, a re-infection is extremely likely. To prevent this and to avoid the development of a chronic malarial toxemia, a vigorous blood building campaign should be instituted just as soon as the febrile movement is controlled. For quick and efficient reconstruction of the partially disintegrated red corpuscles and to encourage the rapid formation of new and functionally active erythrocytes, Pepto-Mangan (Gude) is especially serviceable. Steady treatment with this potent hematinic, for a period of several weeks, is practically certain to restore hemic integrity and place the patient in a position to ward off fresh infection, or quickly throw it off if invasion occurs. When the physician believes that arsenic is needed in the after-treatment, this drug can be readily added to Pepto Mangan (Gude) preferably in the form of Fowler's Solution.

Coryza.

Many attacks of acute coryza might be aborted, in the author's opinion, if taken in time. The patient should be put to bed and given a brisk purgative—calomel at night followed by a saline in the morning. Ten grains of Dover's powder with hot lemonade and a hot air or "poor man's bath" act most beneficially. In carrying out the latter, half a dozen soda-water bottles are filled with hot water, inclosed in socks, and placed alongside the patient, who speedily responds with a generous perspiration.

FELLOWS' SYRUP
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HYPOPHOSPHITES

A uniform result may always be confidently expected from this faithfully-prepared and long-tried preparation

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Preparations "Just as good"

Opium, preferably with belladonna, is one of the best remedies to abort an attack. Ten minims of opium tincture with spirit of nitrous ether and liquor ammonii acetatis every few hours give good results. The author has tried oil of cinnamon in 5-minim (0.3 c.c.) doses with a dram (4.0 c.c.) of olive oil in an emulsion, well diluted, and is satisfied that it acts effectively. Camphor, belladonna, and quinine, if used, must be pushed until dryness of the throat appears.

Locally, inhalations of benzoin or benzoin and menthol vapor give considerable relief. Possibly nothing gives more relief than a spray of cocaine, but if this drug is left in the hands of patients the habit may be formed. If there is no relief within twenty-four hours the nose may be sprayed frequently with oil of cassia and oil of santal, of each 5 minims (0.3 c.c.) in an ounce (3 c.c.) of liquid vaselin, or with a combination of camphor-menthol with oil of eucalyptus and oil of cinnamon. The sniffing up of powdered boric acid is recommended by the author. It stings for a moment, but speedily induces a copious watery secretion, with reduction of the tumidity and stuffiness.

When the mucopurulent stage is reached comfort is obtained by washing out the nose with an alkaline lotion composed of baking soda, borax and sugar, or simple saline, after which the free use of the atomizer has a soothing effect. Excoriation of the nares may be relieved by the use of lanolin or hazeline cream.

The use of a stock vaccine of the Micrococcus catarrhalis has procured some startling results in the author's hands in all stages of "cold," acute or chronic. An acute cold was aborted by 125 millions in six hours; a subacute case with deafness of three weeks' standing, and resisting all other treatment, got well, with normal hearing, in two days. Complete failures, on the other hand, were also witnessed. If the vaccine acts at all it acts promptly, and no other treatment is necessary.—Robertson, Australasian Medical Gazette.

Tuberculosis in Children.

The intracutaneous tuberculin test is considered by the author to present many advantages over other diagnostic tuberculin reactions. It is relatively easy to carry out, the result of the test is readily recognized, and the discomfort to the patient minimal. The amount injected can be accurately gauged. The possibility of injecting different strengths and even a high concentration of tuberculin by this method renders the test available in all cases of tuberculosis. The subcutaneous tuberculin test fails in patients with fever, while the cutaneous reaction fails in cases where the susceptibility of the organism to tuberculin has been reduced through acute infections or cachexia; the intracutaneous method, on the other hand, succeeds in all these cases. It is thue, in many instances, the only procedure to be depended upon. In patients morbidly in dread of tuberculosis, this test, if strong concentrations of tuberculin cause no reaction, will definitely eliminate any possibility of the presence of the disease. The case of a cachectic child with meningitis in which tuberculosis was ruled out by means of this test is cited by the author. He injects one drop of a 1:1000 solution of old tuberculin and, if no reaction follows, increases the strength to 1 per cent., 10 per cent., and even sometimes 100 per cent., some cases finally reacting to the last-named dose?—Engel, Deutsche medizinische Wochenschrift.

Fracture of the Patella.

The following procedure is recommended by the author in this condition: First, a mold is made of the sound knee with poroplastic material, 1½ feet long by 6 inches broad, which is softened in boiling water and then firmly placed on the knee. The mold of the sound knee-cap thus taken is used as a splint for the fractured bone, the fragments being vised in the cap of the splint. A little cotton-wool is placed in the cap; the rest of the splint, extending above and below the knee-joint, is also to be sufficiently padded. Before fixing the splint the fragments are strapped into position by adhesive plaster, longer strips being also placed just above and below the patella and drawn in contrary directions to pull the upper and lower fragments together. Lastly, a plaster-of-Paris bandage is placed over all. In three weeks the plaster-of-Paris is taken off. The splint is kept on for two weeks more, passive exercises begun, and a knee-cap used for two months, after which it is discarded.—Maclachlan, British Medical Journal.

What is Best in Tonics?

Many people, and perhaps a few physicians, are inclined to consider the terms "tonic" and "stimulant" as more or less synonymous and interchangeable. This, of course, is not the case, although some agents employed medicinally may partake of the properties of both and be properly known as "tono-stimulants." Strychnia, for instance, is a heart stimulant but may also be considered as a general nerve and systemic tonic when given in small and frequently repeated doses. While a stimu-

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Address, Opportunity, care The Charlotte Medical Journal.

Morphine, Cocaine and Alcohol.

Morphine, Cocaine and Alcoholic patients treated along lines suggested by the Opium Congress at Shanghai, China, and tested at Bellievue Hospital By Dr. Lambert, of Cornell University, my-self and others. My nurse (for male patients), is a graduate of Trinity College, North Carolina, and was superintendent of public schools in Mississippi and Louisiana, whom I rescued from the curse of morphine after he had spent $1,700 in fake cures and "sanitariums." Correspondence and referred cases solicited.

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SAL HEPATICA is especially valuable when there is torpidity of the bowels or intestinal sluggishness arising from organic derangement of the liver and kidneys. It is the best agent for the relief of that form of costiveness that is ushered in by an attack of colic and indigestion, and not only clears away the effete and irritating matter in the alimentary tract but eliminates the semi-inspissated bile that too frequently induces the so-called "bilious" condition; at the same time an abundant secretion of normal bile is assured, thereby demonstrating its value as a liver stimulant and true cholagogue.

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lant alone is sometimes indicated in conditions of emergency, its long continuance almost certainly produces an after depression. It is sometimes advisable, however, to give stimulant and tonic together in conditions of serious general depression, the first to "boost" the vitality and the second to hold it at the point to which it has been raised and to restore the general tone of the organism. An ideal combination of this nature is Pepto-Mangan (Gude) to which has been added the proper dose of strychnia, according to indications. This combination is especially serviceable in the convalescence of exhausting diseases such as typhoid fever, pneumonia, la grippe, etc. It is also of much value when the heart needs support and the general system requires upbuilding. Pepto-Mangan restores vitality to the blood by increasing the number of red cells and the percentage of hemoglobin, and the strychnia assists in rendering the combination a peculiarly efficient general bracer and permanent reconstituent.

Management of Post-Partum Bleeding.—After every labor, F. Heiman carefully observes the position of the fundus. If no bleeding occurs, the hand is pressed in over the symphysis half an hour after birth, to see if the umbilical cord recedes. If this is the case, the placenta has not yet separated, and expression is performed in 3 to 4 hours. If the placenta is free in the vagina, slight pressure upon the fundus will usually expel it. In case of bleeding, it is important to note the character of the blood. If arterial and of intermittent flow, a tear is likely. Immediate repair is necessary after expression. If the blood flows more continuously and is venous, the uterus will be relaxed and there is imperfect separation of the placenta and atony massage of the womb should be tried, later, Credes' expression, if necessary in narcosis. If this is ineffectual, the placenta must be removed manually under narcosis. Retention of the membranes alone usually is no cause for inter. ference. If the placenta is out and the bleeding continues, the injection of secacornin and hot or cold douches will almost invariably check it. Numerous other methods have been suggested but the author has never found it necessary to resort to them. Thus, tamponade of the uterus is practiced by some, others bend the uterus over the symphysis, turn it spirally or compress it with special instruments. The subcutaneous or utero-muscular injection of adrenalin has been recommsnded as well as the application of a rubber bandage around the waist. Concerning the latter, the opinions are divided. As a last resort, vaginal or abdominal hysterectomy may be practiced, but it is clear that an exsanguinated woman will only rarely recover after so severe an operation.—Muench. med. Woch.

Notes on the Technic of Suturing Blood Vessels with a New Instrument.—Dr. Horsley, of Richmond, Virginia, described a new technic for suturing blood vessels by means of a new instrument that holds the guy sutures in position and keeps the margins of the arterial wound everted. A continuous mattress suture of fine silk is used with a number sixteen straight needle. The instrument consists of a shaft, or handle, six inches long, which curves at one extremity into a shorter shaft one and three quarter inches long. The curved portion is flattened out so as to form a light spring. The short shaft occupies an angle of fifty-five degrees to the long shaft. Buttons are placed in such a position that when three guy sutures in the blood vessel are wrapped around them the circumference of the vessel is pulled into the shape of a triangle. One of the chief difficulties in suturing blood vessels is managing the guy sutures, which is obviated by this method. The continuous mattress suture does not tend to cut the vessel wall, and leaves but little thread exposed in the lumen while making accurate approximation. No skilled assistant is required. After the guy sutures have been fixed on the instrument the tension along the arterial margins remains the same throughout the operation. A point of leakage can be easily demonstrated by pressing the short shaft toward the long shaft, which relaxes the guy sutures. If there is a spurting point, the Crile elamps are re-applied and the point sutured while the blood vessel is still held by the instrument. Several specimens are exhibited. This method can be used either for suturing arteries or for transfusion of blood. In transfusion of blood a point in the vein should be selected near a branch and the branch clamped with mosquito forceps. Often the radial artery contracts so greatly as almost to shut off the flow of blood. When this occurs, a probe anointed with vaseline can be run through the venous branch, through the site of anastomosis, and up into the radial artery, thoroughly dilating it. This will be impossible with a metal cannula without seriously injuring the intima. The venous branch also acts as a guage to indicate the rate of flow.—Abstract of a paper by Dr. J. Shelton Horsley, presented at a meeting of the Southern Surgical and Gynecological Association at Washington, D.C., December 12-14th, 1911.

"infallibility is a word not found in the therapeutic lexicon.

Reliability, however, is a word often looked for and exceedingly necessary in drug therapy. To any remedy whose reputation is based upon reliability, no concern need be given to its infallibility.

Reliability is achieved by compounding a scientific product carefully and uniformly. Antiphlogistine is such a remedy. For years it has given the most satisfactory results in all inflammatory diseases where applied thick and hot and well protected.

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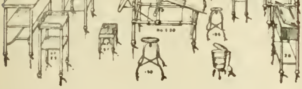

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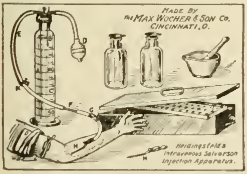
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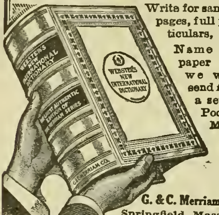

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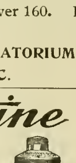

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SPECIAL WESTERN NUMBERS

In furthering the plan of producing special issues of the **American Journal of Surgery** composed of contributions by surgeons residing within a certain geographical area, yet of international reputation there will be issued in the early part of 1912 a **Special Western Number** of this magazine.

Subjects and those to contribute:

The Operation of Gastroenterostomy, by William J. Mayo, Rochester, Minn.

The Surgery of Tendons, by John B. Murphy, Chicago, Ill.

Operative Treatment for Graves Disease, by George W. Crile, Cleveland, Ohio.

Colonic Intoxication, by J. E. Binney, Kansas City, Mo.

Practical Points in the Surgical Treatment of Exopthalmic Goitre, by A. J. Ochsner, Chicago, Ill.

Treatment of Foreign Bodies in the Esophagus, by E. Fletcher Ingals, Chicago, Ill.

Brain Surgery Technique, by J. Rilus Eastman, Indianapolis, Ind.

Treatment of Abscesses and of the Necrotic Foci Resulting from the Use of Salvarsan, by A. Ravolgi, Cincinnati, Ohio.

Treatment of Prostatic Obstruction, by E. O. Smith, Cincinnati, Ohio.

Subject not Announced, by H. Tuholske, St. Louis, Mo.

Artificial Tendons and Ligaments in the Surgical Treatmeut of Paralysis, by Nathaniel Allison, St. Louis, Mo.

Uterine Cancer, by John C. Murphy, St. Louis, Mo.

Arthritis Derformans, Leonard W. Ely, Denver, Colo.

Acute Angulation and Flexure of the Sigmoid as a Causative Factor in Epilepsy with special Reference to Treatment, by W. H. Axtell, Bellingham, Wash.

The character of contributions prepared by these well known surgeons are of such a nature as to make this number particularly interesting.

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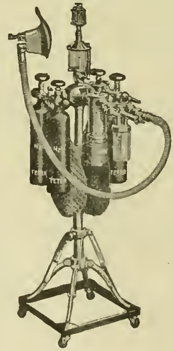

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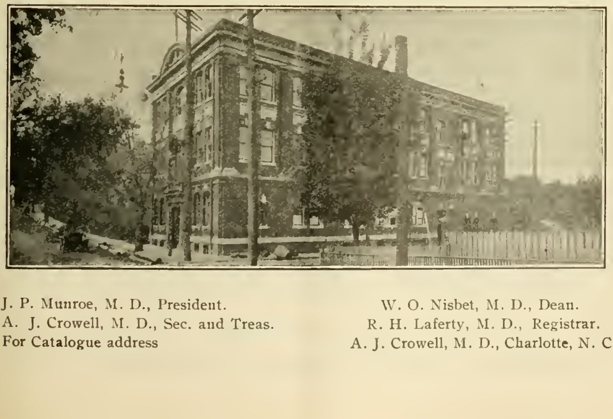

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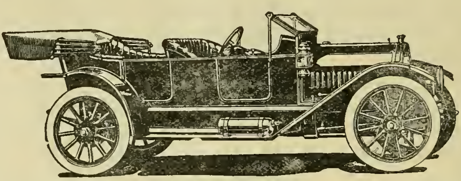

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TRI-STATE MEDICAL ASSOCIATION OF THE CAROLINAS AND VIRGINIA.

Annual Meeting at Columbia, S. C., Feb. 23-24, 1912.
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Annual meeting at Birmingham, Ala., April, 19 1912. J. N. Baker, M. D., Sec., 602 S. Perry St., Montgomery, Ala.
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Annual Meeting at Oklahoma City, Okla. October, 1911.
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FLORIDA MEDICAL ASSOCIATION.

Annual meeting at Tallahassee, Fla., May, 10, 1911.
J. D. Fernandez, M.D., Sec., Jacksonville, Fla.
James D. Love, M. D., Pres., Jacksonville, Fla.

MEDICAL ASSOCIATION OF GEORGIA.

Annual Meeting at Augusta Ga., April, 17-18-19 1912.
W. C. Lyle, M. D., Sec. Augusta, Ga.
W. L. Felts, M. D., Pres., Corrollton, Ga.

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Annual meeting at Paducok Ky., Oct. 1911.
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Annual meeting at Shreveport, La., May, 30-31, June 1st, 1911.
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MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA.

Next Annual Meeting at Hendersonville, N. C. June, 1912.
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D. A. Stanton, M. D., Sec., High Point, N. C.

NEW MEXICO MEDICAL SOCIETY.

Annual Meeting at Las Vegas, N. M., (date not yet decided.) 1911.
Dr. R. C. Mcbride, D. Las Cruces N. M. Secretary.
F. B. Test, M.D., Prest, E. Las, Vegas, N. M.

SOUTH CAROLINA MEDICAL ASSOCIATION.

Annual meeting at Columbia, S. C., April 20, 1912.
Edward A. Hines, M. D., Sec., Seneca, S. C.
J. W. Jervey, M. D., Pres. Greenville, S. C.

TENNESSEE STATE MEDICAL ASSOCIATION.

Annual Meeting at Nashville, Tenn., June 11, 1911.
Geo. H. Price, M. D., Sec., 146 8th. Ave., Nashville, Tenn.
John A. Witherspoon, M. D., Pres., Nasheville, Tenn.

MEDICAL SOCIETY OF VIRGINIA

Annual Meeting at Richmond, Va. Oct. 24-27, 1911.
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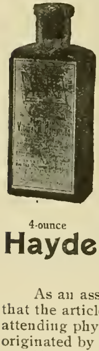

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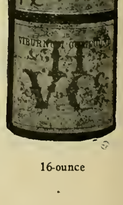

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The Charlotte Medical Journal

VOL. LXV CHARLOTTE, N. C., FEBRUARY, 1912. No. 2

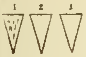
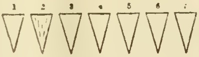
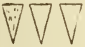
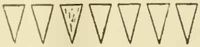
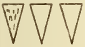
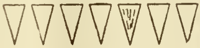
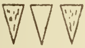
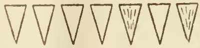
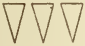
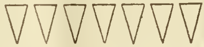
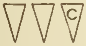
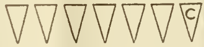
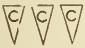
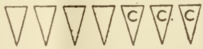
Significance of Cloudy Urine.

By Dr. A. J. Crowell, Charlotte, N. C.

Next to the pulse, temperature, and probably the blood, the urine offers the greatest possibility for an insight into the workings of the human system. It is highly important, therefore, that this excretion be studied intelligently to ascertain pathological conditions of the body and more especially with the view of diagnosing diseased conditions of the genito urinary tract and their location. It is with the view of offering a few practical suggestions that will aid in the diagnosis of diseased conditions of this tract that I offer this paper.

Cloudy urine may be due to urates, phosphates, bacteria, spermatozoa, mucus, pus, and blood. If due to urates it will clear up on heating. If due to phosphates it will clear up on the addition of acetic acid. If due to bacteria it is opalescent and can be cleared only by filtering through porcelain and the organisms are found by microscopical examination.

IN CHRONIC URETHRITIS the findings are as follows:

Portion involved	Meatus.	3-Glass Test.	The Irrigation Test.	Prostate.	Secretion obtained by massage.
Pendulous	Disch'rge or glued.			Normal.	Normal elements.
Bulbous	Negative.			Normal.	Normal elements.
Posterior urethritis without prostratis.	Negative.			Not enlarged.	Pus cells in small number.
Posterior urethritis with prostatitis.	Negative.			Indurated or enlarged.	Pus cells in great number
Prostatitis without nephritis.	Negative.			Indurated or enlarged.	Pus cells in great number
Seminal vesiculitis.	Negative.			Seminal vesicle indurated; enlarged.	Massage of vesicle gives pus.
Cystitis and pyelitis.	Negative.			Prostate may or may not be involved.	May or may not contain pus.

Spermatozoa cause cloudy urine in seminal vesiculitis and especially the atonic form and is generally seen in the last glass of the three glass test. However, the diagnosis in such cases can only be made microscopically, as a somewhat similar condition is seen in prostatitis and trigonitis. In conjunction with the symptoms and three glass test, we can almost make a diagnosis between these conditions macroscopically, but for a positive one the microscope is indispensable. Cloudy urine caused by mucus will reveal itself in the characteristic mucus cloud.

Blood and pus are the most common causes of cloudy urine and it does not clear up on heating or the addition of acid but diagnosed microscopically. In affections of the kidneys cloudy urine is produced by inflammation,—either in the form of pyelitis, pyelonephritis, tuberculosis, infarct stone nephritis or neoplasm. Inflammation of the ureters produced by these same causes will result in a cloudy urine and the location of the lesion can in a measure be ascertained by ureteral catheterization, and a chemical and microscopical examination of the urine. The location of the lesion producing cloudy urine can be made in a measure satisfactorily without the cystoscope in the following way: A cloudy urine due to pus and blood and acid in reaction without frequency of urination indicates kidney, when alkaline and with frequency the trouble is in the bladder, seminal vesicles, posterior urethra, or prostate. In urethral, prostatic and seminal vesicle troubles it is not necessary that the urine be alkaline but in cystitis this is the rule. In addition to pus and blood we have albumen and tube casts when the lesion is located in the secreting portion of the kidney. Such is not the case when the lesion is in the ureter or kidney pelves,—the albumen present is in proportion to the amount of blood and pus, and no tube casts or probably an occasional hyaline one in pyelitis. A cloudy urine fifteen minutes after thoroughly cleans-

IN ACUTE URETHRITIS the findings are as follows:

Portion involved	Meatus	3-Glass Test.			The Irrigation Test.							Prostate.	Secretion obtained by massage.
		1	2	3	1	2	3	4	5	6	7		
Pendulous urethra.	Disch'rge	C	▽	▽	C	▽	▽	▽	▽	▽	▽	Normal.	Not done (inadvisable).
Bulbous urethra	No discharge.	C	▽	▽	▽	▽	C	▽	▽	▽	▽	Normal.	Not done (inadvisable).
Poster'r urethra	No discharge.	C	C	C	▽	▽	▽	▽	C	C	C	Swollen.	Not done (inadvisable).
Pendulous and Bulbous.	Disch'rge	C	▽	▽	C	▽	C	▽	▽	▽	▽	Normal.	Not done (inadvisable).
Pendul'us, Bulbous and Posterior.	Disch'rge	C	C	C	C	▽	C	▽	C	C	C	Swollen.	Not done (inadvisable).
Bulbous and Posterior.	No discharge.	C	C	C	▽	▽	C	▽	C	C	C	Swollen.	Not done (inadvisable).
Posterior (slight)	No discharge.	C	▽	▽	▽	▽	▽	▽	C	▽	▽	Not enlarged.	Not done (inadvisable).

ing the bladder means kidney. If there be any doubt, after the above plan has been carried out, as to the location of the lesion, —whether the bladder or kidney,—the ureteral catheter will not only determine the location of the lesion but the condition of each kidney and assist in determining the etiological factor. In a general way a cloudy urine from the kidney without organisms means tuberculosis. I do not mean to say that you cannot find T. B. in the urine from a tuberculous kidney, but they are few and require a special stain. Such is not the case when due to other infections, but they are easily stained and found in great quantities, as a rule, microscopically. In a general way the above plan of locating the lesion is of great value, but to ascertain the etiological factor as well as to locate the lesion, the cystoscope, ureteral catheter, collargol, x-ray, and guinea pig are indispensable.

To locate the lesion in urethral troubles and differentiate them from bladder lesions by the three and seven glass method, I shall endeavor to show you in the drawings on the black-board, which is used in the Dispensary at the Johns Hopkins Hospital. Lesions in the prostate and seminal vesicles are made by the seven glass test, digital touch and microscopical examination of the secretion from these organs. Of course the cystoscope should always be used in chronic bladder troubles and the man who fails to do or have this done in such cases today is unjust to his patient and will eventually work to his detriment.

X-Ray as an Aid in the Diagnosis of Gastric Cancer.

By Dr. W. O. Nisbet, Charlotte, N. C.

It is an admitted fact at the present time that x-ray examination is well-nigh indispensible in the diagnosis of gastric cancer and that the technical methods are being daily improved I would call attention to the further fact that extensive experience is required in proper reading of the radiographic picture, for misinterpretation may lead to serious error. It is very probable that with further improvement of technique and interpretation, that the time will come when the information not to be had from chemical and microscopical examination will be supplied by that obtained from radiograph.

Time will not permit a rehearsal of the work being done by the numerous workers in this field, but I wish to briefly consider the recent advances set forth by Holzknecht and Haudek in the Journal (November number) of the Archives of the Roentgen Ray. These observers claim, by combining their method with the methods previously published by other Roentgenologists, to have mapped out a practical working basis. Time may reveal that they claim too much; on the other hand it may disclose the fact that they are correct. It may be well to state that the following are the routine steps in making a methodical examination of a case of suspected gastric carcinoma:

1. Careful history.
2. Physical examination.
3. Gastric analysis.
    a. Estimation as to acid factors.
    b. Estimation as to ferments.
    c. Motility test.
    d. Microscopical examination, gastric contents.
    e. Radiographic and flouoroscopic examination.

It is an admitted fact that with our present chemical and microscopical methods that sufficient evidence is not obtained to make a diagnosis of early gastric cancer or even a diagnosis in more advanced cases in which tumor is not palpable. It is just at this point that the x-ray examination comes to our aid and this brings us to consideration of the double bismuth test meal of Haudek. Haudek working in Holzknecht Laboratory employed the double bismuth meal as follows:

At seven a. m. the patient is given one oz, of bismuth carbonate suspended in a glass of water. Six hours thereafter flouoroscopic and radiographic examination is made. From this we learn the gastric motility. It is claimed that the normal stomach shows no bismuth residue at the end of six hours, therefore if bismuth residue is found at this time there exists an impairment of the motor power; also these additional points:

a. A small residue may mean a spasm or stenosis of the pylorus.

b. A large residue lying several fingers breadth below the umbilicus and extending across the abdomen points to a dilated stomach arising from an uncompensated pyloric stenosis.

c, A medium residue to the left of the umbilicus along with the snail shaped shadow and with the greater curvature well defined and sharply rising at the pyloric end and in addition, with the pylorus drawn over to the left of the umbilicus by the shrinkage of the lesser curvature, means ulcer of the pylorus or cancer engrafted on ulcer base.

d. Again a medium residue displaced to the left of the umbilicus with margin of shadow rising abruptly and presenting a

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*Read before the Seventh District Medical Association at Gastonia, N. C , December 5th, 1911.

notched and toothed appearance and with no displacement of pylorus or bulb of duodenum. This group speaks for carcinoma.

Haudek also states that we may approximately tell the time the stomach has been emptied by observing the position of the bismuth column in the intestine; in the normal cases the head of the column is found in the ascending colon and the tail in the last part of the ileum; in cases showing absence of free HCl (Achylia) in six hours the small intestine is empty and the head of the column has reached the splenic flexure of colon.

Now as to the second step of the Haudek method, immediately after the first flouoroscopic and radiographic examination the patient is given a second bismuth meal consisting of an ounce of bismuth carbonate, suspended in a glass of water. A picture is then taken. From this plate we learn the form, position and size of the stomach as follows:

a. Whether there is a normal shadow of the stomach.

b. A marked defect in the shadow.

c. Hook shape stomach.

d. Displacement upward and to the left and snail form shadow.

e. Large sickle residue with dilatation.

f. Large sickle shaped residue with marked defect in filling of pyloric portion.

g. Marked defect in shadow of middle of stomach or in the pyloric area, with transverse constriction of greater curvature.

The following symptom groups embracing chemical and radiographical signs, are given by Haudek as being diagnostic of the various types of gastric carcinoma. For the sake of clearness the symptom complex of a normal stomach is given first.

Normal Stomach.

1. Stomach empty of bismuth in six hours. Head of bismuth column in ascending colon.
A. 2. Stomach shadow normal.
3. No increase in peristalsis or antiperistalsis.
4. No sensitive point.
5. HCl normal.

Symptom Complex Small, Early Carcinoma.

1. Achylia.
B. 2. Normal stomach shadow.
3. Bismuth residue after six hours.

Absence of free HCl and presence of bismuth residue point almost unfailingly to organic obstruction of the pylorus, and since there is no defect in the shape of the bismuth shadow the case is operable. Many of the cases of this type present no clinical symptoms except loss of appetite and weight and yet operation reveals presence of small cancer.

Carcinoma. No Stenosis. Inoperable.

1. No residue after six hours.
C. 2. Marked defect in gastric shadow.
3. Horn shaped stomach.

Haudek has found a whole series of these cases which showed no clinical symptoms except anorexia and some loss of weight and yet they are so far advanced as to derive little or no benefit even from gastroenterostomy; more radical surgery of course being inadvisable. Here, although the author does not insist upon it, I think a confirmatory chemical examination should be made.

The horn shaped stomach alluded to in the above symptom group usually indicated a widespread carcinomatous infiltration which contraindicates resection; if on the other hand the stomach retains its ordinary physiological hook form with the above symptoms the case may be considered operable.

Carcinoma Stomach Operable.

1. No residue after six hours.
2. Marked defect of the stomach shadow in middle or pyloric portion of
D. stomach.
3. Hook shaped stomach.

This type is operable, provided there are no adhesions or metastases.

Carcinoma on Base of Old Ulcer with Stenosis.

1. Large sickle shape residue.
E. 2. Marked defect in filling of pyloric area.

This form is comparatively common. We learn here that advance stenosis with dilatation may exist without vomiting or other severe symptoms—a fact which has not heretofore been considered true. A previous history of ulcer with evidence of same revealed by test meal is very important confirmatory data in this type.

Should the experience of future investigators confirm the findings of Holzknecht and Haudek in radiographic study of carcinoma of the stomach a decided advance will have been made, especially in its early diagnosis. These observers emphasize the fact that the chemical and motility tests as used at present are in no sense to be disregarded, and that by the joint information elicited decidedly greater accuracy is to be attained in the diagnosis of gastric cancer.

The Comparative Effect of Mercury and Salvarsan on the Wassermann-Noguchi Reaction for Syphilis.

By Dr. F. D. Austin, Charlotte, N. C.

There has been much comparative research work done on the effect of mercury and salvarsan on the Wassermann-Noguchi reaction by the numerous investigators to determine the end results of the two treatments upon the syphilitic antibodies in the blood, and it seems that the time has not yet come to make a definite statement upon the results. It is known that the reaction often disappears after a short course of mercury treatment, as will be pointed out below, often to return again within a greater or lesser period of time.

Blaschko studied 52 positive cases of syphilis, and after treatment 45 gave negative results. Citron observed that 81% of the clinically diagnosed syphilis was positive, while after treatment of the same cases the positive reaction was reduced to 65%.

Bruck and Stern obtained positive reactions in 81½% in 173 untreated cases, and in another group of treated cases got positive reaction in 28%. Hoehne studied 211 cases which was positive before treatment and found after treatment that positive reaction was present in 44% of his cases. In five cases after 12 injections of salicylate of mercury over a period of two months the reaction was still positive. Lesser states a positive reaction can be made negative in about 35% of cases by giving 30 inunctions of mercury, 12 hypodermic injections of an insoluble salt of mercury, or 25 injections of the soluble salt of mercury. The rapidity with which the reaction disappears varies with the different individuals. Baas found that after a course of injections over two or three months the reaction became negative in 76 out of 82 cases, but that the positive reaction will return within a month if treatment is stopped. Pederson followed carefully the course of treatment on a large number of cases by the Noguchi system. The clinical classifications of cases by this author is most elaborate and points out very clearly how the reaction stands to the clinical side of these cases. In order to trace the progress of this test, his records have been divided into the following classes with the following results:

Class A—Chancre untreated—no secondary symptoms.
" " 1—No treatment—16 cases positive reaction 96%.
" " 2—Treatment 3 cases—positive reaction 100%.
Class B—Chancre unhealed—secondaries out.
" " 1—No treatment—11 cases positive reaction 100%.
" " 2—Treatment 5 cases—positive reaction 100%.
Class D—Chancre healed recently—secondaries out.
" " 1—No treatment 12 cases—positive reaction 100%.
" " 2—Treatment 23 cases—positive reaction 83%.
Class F—Duration of infection 6 to 24 months. Treatment irregular 13 cases—positive reaction 85%.
Class G—Tertiary period over 24 months. Irregular treatment 72 cases of the different tertiary lesions—positive reaction from 43 to 75%.

Craig of the U. S. A. Medical College gathered 52 cases that had been treated with mercury varying from two weeks to twelve years with an average positive reaction of about 61 per cent. The ones that had been treated for 8 and 12 years respectively gave a positive reaction in 100 per cent. Craig arrived at the conclusion that the disappearance or reduction of the reaction during the treatment is a valuable indicator for the effectiveness of the treatment. Irregular and inadequate therapeutic measure, no matter how long a period it may be extended, leaves a reaction still positive.

The treatment of syphilis with Dioxy-diamido-arseno-benzol or the so-called 606 upon the Wassermann-Noguchi reaction has been studied by various investigators with the following statements:

Wechselmann treated 1250 cases and observed relapses in less than .04 per cent.

Michalis treated 110 cases and had relapses in less than .03 per cent. He obtained negative reaction in from 2 to 10 weeks after the injection.

Herxheimer treated 798 cases and had relapses in about .04 per cent. over a period of 5 months.

In all the above mentioned cases there was but one dose given and the 606 was used in a neutral or slightly alkaline solution intramuscularly or subcutaneously, and they use only .3 gm. whereas we use .4 to .6 gm. now.

Schreiber administered it in 565 cases intravenously with only one relapse, or less than .002 per cent., and he always orders a second dose if the reaction remains positive 3 or 4 weeks after the first dose.

Drs. Fuller, Pedersen, Pollitzer, and others observed 102 cases with 10 relapses, or less than 10 per cent., after one dose of .6 gm. intravenously, and the most of these were malignant or tertiary syphilis. Six of these were re injected and with good results except one relapse, and at the end only 3 were still positive.

Personally, I have made the reaction in 29 cases treated with mercury in its varying stages. Twenty three cases of secondary syphilis, 16 of which received 1.5 gr. of salicylate of mercury hypodermically every 7 days until they had received 10 or 12 doses over a period of 2½ months, all except one gave a positive reaction after stopping the treatment for two months. Eight cases had yellow iodide of mercury

¼ gr. t. i. d. for a period of about three months; all gave a positive reaction after stopping the treatment from one to two months. The six cases of tertiary syphilis were treated three to five months with yellow iodide of mercury 1-5 to 1-4 gr. t. i. d. together with K. I. in increasing doses from 10 to 60m t. i. d., and of these six cases four gave strong positive reaction, while one was weak and one negative. One of these cases had chancre 20 years ago. One 24 years ago. One 12 years ago. One seven years ago, and two four years ago. The one who had the chancre seven years ago was negative.

I have been able to check up 22 cases, 18 secondary and four tertiary, treated with 606 with the Wassermann-Noguchi reaction since returning from New York on the first of November. Of the 18 cases all of these received one subcutaneous injection except two which had two injections; there was two positive reactions and one of these was very weak.

Of the four tertiary all received one dose subcutaneously—none was positive. The blood test in these cases was done three weeks to eight months after the injection. I wish to state here that the best results are obtained by the intravenous method. You have less pain than in the subcutaneous or intramuscular: also have it directly in the blood stream in a fresh and concentrated solution as compared with the subcutaneous or intramuscular methods. I use it tntravenously altogether now.

If we are going to use the blood test as an indicator to tell us whether or not our patient is cured, and if we are going to accept the test as proof of the same, then we must accept the fact that salvarsan or 606 is by far the best remedy we have found.

Tea Talk.

By Geo. M. Niles, M. D., Atlanta, Ga.

"The tea, that in the magic of its flow
Annoints the tongue to wag of so-and-so,
To gabble garbled garulousness ere
You lay the cup and saucer down and go.

"And we that now make madness in the room,
Where last week's lion had his little boom,
Ourselves must go and leave that flattering din,
And let them brew another tea—for whom?"
Omar Khayyam, Jr.

Tea, a cup that cheers but not inebriates, possesses an important place in history, literature and dietetics. It has been extolled and cursed, loved and abominated, honored and despised, and, withal, has pursued the even tenor of its way, finding a nook in the homes of the exclusive and the democratic, the blue-blooded and the *hoi polloi*.

All that can be affirmed regarding the early history of the beverage is that it appears to have been used for ages in China, where it is believed by the natives to be indigenous. It is mentioned by the Portugese writer Maffei, in his *Historiæ Indicæ*, as a product of both China and Japan. The first reference to it by an Englishman is found in a letter written in 1615 by a Mr. Wickham, which is still preserved in the archives of the East India Company. It is noticeable that the Portugese and English writers used the native name *cha*, though Maffei called it *chia*.

From this time it became gradually known to the wealthy citizens of London, in the form of occasional presents of small quantities from India, obtained from China, or by small lots that found their way into the markets from time to time, but it commanded an exorbitant price, being worth in our money from twenty-five to fifty dollars a pound.

In 1657 a rather large consignment fell into the hands of a thriving and enterprising London merchant, Thomas Garraway, who established a house for selling the prepared beverage; and that house, under the name of "Garraway's Coffee House" is still in existence, enjoying at this time a continued popularity.

During those years there were many tea and coffee houses more or less fashionable, where men and women of high and low degree met, and whiled away the hours over the teacups,much the same as in clubs and cafes today.

By the early part of the eighteenth century tea became quite general in use, winning for itself warm admirers as well as bitter enemies. Among the former was Dr. Samuel Johnson, who delighted to linger long among his cronies in the various tea houses, and who spoke of himself as "a hardened and shameless tea drinker." About this time, too, John Wesley was in his zenith, and in him the loved beverage found a warm opponent. He thundered against it in and out of season, in his wrath denominating it as "one of the machinations of the devil."

It was in the latter years of this century that the never-to-be-forgotten "Boston Tea Party" occurred, and for a time the tea drinkers of the new world, from patriotic motives, either went without their favorite solace, or used various substitutes. Leaves of strawberry plants, currant bushes, sage, and a shrub called ribwort were brought into service, and called "liberty tea."

It was not for long, however, that the cheering draught was kept in exile, for, with the advent of better feeling among the English-speaking people, it again came into general use, and at present is drunk in nearly every corner of the globe.

It is not strange that many misconceptions should arise concerning an agent, whose qualities vary so widely according to the preparation of either the leaf, or the manner of brewing the beverage, and I shall briefly cover some of the points which may be of interest.

Tea-leaves were primarily culled from two species of plants, *Thea chinensis* and *Thea assamica*, but at present there are numerous hybrids. Teas grown in China, Japan, India and Ceylon vary somewhat in flavor, owing more to different treatment in curing and marketing than to variations in soil or climate. The finest tea is made from the small tender leaves at the end of new shoots, each succeeding pair of leaves upon the branch furnishing a different and less valuable grade. Three or four pairs of leaves or grades are gathered, the various kinds being classified as green or black, according to the method adopted for curing them. Black tea is made by "withering" the freshly picked leaves in the sun. They are then mashed and rolled in order to break the fiber and cells of the leaf and liberate their constituents. After this the leaves are gathered together and fermented, during which process a part of the tannic acid in them is made less soluble, and the essential oils are modified in character. They are again exposed to the sun, and finally are "fired" or dried in the oven.

Green teas are withered in pans that are at a temperature of about 160 F.; they are then rolled, withered again, sweated in bags, and finally slowly roasted. By the process of preparation through which it passes, green tea contains more than twice as much of the astringent tannin as black tea; and consequently is regarded as less wholesome than the latter. It is also believed to have a somewhat less stimulating effect upon the nervous system, though this can hardly be accounted for by the slight change in the percentage of *thein* cont .ined therein, this substance being the alkaloid or active principle chiefly responsible for the exhilarating influence of tea upon the nerves.

The thein of tea, and caffein of coffee are chemically identical, and much alike in their action, though not entirely so. Experiments on frogs have shown a marked difference in their effects, for while thein will produce convulsions, caffein will not; also thein destroys the sense of smell early in the poisoning stage, but caffein does not at all, unless in the very last stage.

The peculiar stimulating properties which tea possesses, as well as its color and agreeable flavor, depend on several factors, among which are the season of the year at which the leaves are gathered, the age of the leaves, and the skill, manual or otherwise, with which they are prepared. The flavor arises from volatile oils which develop during fermentation, and it is in these minor substances that the many differences arise distinguishing good from bad tea.

Both the aroma and flavor of tea are often artificially increased or altered by the addition of such sophistications as the leaves of orange flowers, jasmine, or roses. In addition, much depends on the water in which the tea is made, as to whether it is hard or soft. Soft water extracts more of the soluble material of the leaves, yielding a beverage of a darker color. Water containing much iron or lime salts should be boiled with carbonate of soda before it is used for making tea.

There is much art in brewing good tea—the art which preserves the delicacy of flavor, the beguiling aroma, and the gently stimulating effect. The best authorities claim that the water should be poured upon the tea leaves when boiling, and the infusion should not last over three or four minutes, lest, by longer infusion, materials should be extracted from the leaves, which, while making the tea appear stronger, markedly diminish its delicate taste.

The effects of tea naturally depend on the amount drunk, the strength, the quality of the tea, the condition of the digestive tract, and the age of the drinker. Like all other beverages containing a stimulating principle, it tends to produce an habitual craving, so that some individuals suffer from "tea inebriety" as from other stimulants.

When tea disagrees, or when it is taken to excess, the ill effects are referable to its action on the digestion and nervous system. If taken in large quantities with meals, it precipitates the digestive ferments, retards the activity of the stomach juices, occasioning gastric irritation, and in many instances inaugurating a gastric catarrh of indefinite duration. Copious draughts of black tea, strong in tannin, are productive of constipation, followed by flatulence, which in turn is responsible for abdominal distress. The malign effects of too much tea on the nervous system is manifested by alternate exhilaration and depression, restlessness, worry and insomnia, sometimes merging into sensory disturbances, muscular twitching, palpitation, irritability, and a general sense of ill being, unless the nerves are highly strung up by the thein.

The temperament of the individual largely governs these evil results, for those of robust physique, who are out in the open, and who perform manual labor, do not suffer as do the weak and fragile tea habitues, who sit around the fireside, sipping cup after cup, indulging in endless small-talk, who depend on "tea and toast" to keep warm their bodily furnaces, instead of good red meat and other wholesome viands—these are the "tea tipplers," who lapse into miserable, sickly slaves to the drink, that should be simply cheering and refreshing.

Under favorable conditions, and when drunk with judgment, tea has many advantages, rightly filling a niche only secondary to that other universally-loved beverage, coffee.

It is mildly stimulating to the nervous system, refreshes the mental machinery, and relieves bodily fatigue. For headache asising from "run-down nerves," it often affords prompt surcease, and, during treatment for chronic opium or alcoholic habituation, it is most helpful.

Some of the effects of tea are not strictly due to its action on the nerves, It introduces into the system considerable hot water, when taken hot, flushing the kidneys, encouraging perspiration, and aiding in keeping up bodily warmth, if too cold: or aiding in reduction of temperature by increased evaporation from the surface, if the body is too warm. Hot tea, also, will augment the action of an early morning aperient, though this may be in the main due simply to the hot water.

Many elderly people find tea particularly satisfying and soothing, after reaching a period of life when the functional activity of the stomach is gradually weakened. At this time, when "the shadows are lengthening," and the digestive department finds difficulty in furnishing a sufficiency of heat and energy units, generous libations of tea often cheer up the flagging stomach and intestines, enabling them to better perform their necessary tasks.

The refreshing effects of tea, when taken into an empty stomach after bodily fatigue, may continue three or four hours, a period considerably longer than that bestowed by coffee, wine or whiskey. In excessively hot weather, nothing is more delightful than tea, ice cold, sweetened to suit, with a few random drops of lemon juice that impart a certain piquancy to the taste.

On the whole, this gently exhilarating beverage has much to commend it, and, unless taken unwisely or to excess, lends a gentle stimulation, bracing up tired nerves, toning relaxed muscles, bestowing good cheer to the strong, renewed energy to the weary, solace to the aged, and comfort to its numberless devotees in every quarter of the globe.

920 Candler Building.

Mr. Dooley on the Scientific Doctor.

(Beggin' th' Pardin iv Mr. F. P. Doon)

By F. Julian Carroll, M.D , Summerville, S. C.

"Science is makin' vast sthrides these days," observed Mr Hennessy reflectively.

"Thru f' ye," commented Dooley, placing a foaming mug of beer on the counter and carefully wiping up the overflow.

"Oi'm thinkin' iv givin' oop Docthur Killy an' implyin' wan iv th' new scientific physiciuns wid hospittle exparience," continued Hennessy, thoughtfully sipping the amber beverage.

"A most toimly suggistion, as Hogin wud say. Ye'd be afther makin' a foine subjic for pathylogicil invistigatins," commented Dooley gravely.

"An' what's thot?" asked Hennessy in alarm.

"Will, thin, 'tis this-a-way: Supposin' ye shid happin' t' be a little off an y' feed, an' not falin' y' usul appethite ye shud imbibe a loit supper iv a pound iv chase an' crackers, a pot iv cabbage an' cor rn bafe, a dozen bottuls iv bee-r, an' a quar-rt iv butther mailk; an, bein' none uv th' bist t' sthart wid. as I hov mintioned, y' ar-re sazed wid a sthrong an' will dayvilloped pain in th' ragion iv th' har-rt—or in that vacinity. Bein' toired iv th' un-scientific ways iv Doc Killy, y' sind in a foire allarum an' have the ambilance frim th' Cook Counthy Hospittle come an' take ye t' thot justhly cillibrathed institushun; an' wantin' an up-ter-date an' thouroughly scientific docthur, y' call f'r Doc Spirilla Staffy Licocky.

Ye lay there in a noice clane antiseptic hospittle cot, falin' loik y' had swallid sivinty noine har-rd shelled crabs, an' th' was a tryin' t' claw th' ways out through th' linings iv ye. Ye ar-r, all th' toime badly damagin' y' sthor-re tath in 'y manly iffortbs t' kape from howlin' wid pane; but ye ar-re havin' scientific tratemint, so what's th' odds? Afther about an hour-er an' a half, along cooms a nice clane, stirilized nurse. Sh' takes a lile glass tube out iv a glass full iv car-rbolic souloution, an' sticks it in y' mouth; an' while y' are tryin' t' brathe through y' nose (th' same bein' rindered impossible be raysin iv th' lick ye raycaved an that mimber at th' last picnic iv th' Loyil Sons) she counts y' poolse an' respirrathin; thin sh' takes th' glass out, looks at it, an' writes somethin' about ye an th' rechord.

"Whin will Doc Licocky be along?" ye ask fably, th' nurses attintions havin' failed t' raylave th' pain.

"Not 'till termorrer mor-rnin," she answers swately, "but Doc Antiseptikus, th' House Physician, will bay along prisintly," she adds be way iv consilation..

"Be this toime, ye ar-re bayginnin' t' think that ye'd swallid a ton iv schrap iron wid tin pinny nales an th' soide, instid iv th' gintle little male, that Oi hav' mintioned; but ye tur-rn over an' wait as will as ye kin f' Doc Antiseptikus.

"Finully a young felly what looks loik he is too much iv a kid t' be away frim home an' mither, all diked out in a span new sooth iv white chlothes, which is a csoss baytwane pajammer-rs an' a barbers unifor-rm, comes along an' star-rts t' take ye histhry, as th' calls it. Ye ar-re thinkin' that y' have made a misthake an' landed at th' polish sta-ation instid iv th' hospittle, but y' give th' daysired infimattin as near as possible without tellin' th' thruth, an' be th' toime ye have exposed all y' youthful indiscreshuns an' fambly failins, an' he has raycorded th' same an th' paper what th' calls th' char-rt, ye ar-re about raydy t' sind f'r th' praste. Thin he takes an insthrimint wuth a sort iv telyphone attachment frim wan iv his pockits, an' star-rts t' listhen all over y' body. Ye think that he is listhenin' aroun' to hear anything t' ye detrimint which y' failed t' mintiod a while back; but ye ant sur-re about this an' ye hold ye breth as much as possibul. Thin he takes another insthrimint out'n another pockit, wid a dial an it (th' dial is an th' insthrimint an' not an th' pockit, d'ye moind) an' he tois this 'round ye ar-m, an' blows at wan ind iv it wuth a kind iv rubber ball. Ye think he is thryin' t' blow ye full iv gass—but he isn't Hinnissy, th' ant room f' no more in y' compisition—he's just bein' scientific an' takin' y' blood prissure. "Two hunnud an' fifthy," he mutthers, and ye baycome alar-rmed—ye think he is alludin' t' ye timperature—but he isn't Hinnissy—an' I dunno what he is doin'. Thin he takes a little flat piece iv glass out iv another pocket—he's full iv pockits, d'ye moind—an' he takes a knife out iv another, thin he sloices ye an th' ear-r. "An' what ar-re ye bladin' me fer?" y' may fale incloined t' ask.

"Oi wants t' git th' count iv th' lookisites an' the rid blood cor-rpuschuls," he says carelessly, just loike thim was or-rdinnary craytures.

"Hove Oi got thim things inside iv me?" ye ask in thrimblin' tones, falin' all over ye body fr' symptims iy th' prisince,

"T' bay sur-re ye have," he says, "It's fissylogical to have thim," he says.

"Ar-re th' dangrous?" ye ask.

"Not naycessarily," he says, "but," he says, "it's impor-rtant t' git th' opsonic indexes," he says, "An' t' see," he says, "whether phaygisiotosis is established. Baysides," he says, "Oi must make the Weedall tist, an' look f'r th' filar-ria sanguinar-ry hominy, an' th' plasmojum Malari Anna."

"Quite thrue," ye obsar-rve, "an' Oi'm glad you thought iv it Doc. I didn't think, and Doc Killy never tole me, that I had all thim animils in me inside; but Doc," ye exclaim, "cud ye give me a tayspoonful iv parygorrick or a cup iv ghinger, or a drap iv brandhy t' raylave me pain while ye ar-re looking f'r thim bastes in me blood?"

"Be no manes," he says, "that wud disgoise th' simtums," he says; "but I'll bay aroound in a coople av hour-rs again an' we will take ye into the X-Ray room an' take," he says, "a rady-o-graff," he says, "iv y'r stomick," he says.

Whin he comes back, th' puts ye up an a stretcher an' wheels y' into a little room an' turns out'n all th' loights. Thin th' sloides ye up a large insthrimint an wan iv th' docthurs presses a buttin an' the insthrimint baygins t' spit an' sphutther an' flash lightenin. Ye baygin t' say all the prayers that y' kin riccolict; thin th' doctor baygins t' look ye over wid what he calls a Flora scoop. "Oi'll make a negitive iv his stomick," he saye. "Me stomick seems to bay negitive enuff as it is," ye answer, but th' take no notus iv ye, an' prisintly th' takes you back t' bid, and laves ye f'r th' night."

Be th' mornin', owin' t' th' operashun iv what Doc Killy calls th' "vis medica-tricks naturee," you ar-re falin' a lot better, an' when Doc Antiseptikus cooms along an' ordhers so manny sontygrams iv mate, so manny lithers iv milk an' so manny sontyghrades iv bread, ye fale quite cheer-rful.

"I giss this male is aboot what I naded, Doc," ye say. "That lightnin' tratemint done th' wor-rk, and I reckin," ye say, "that it aboot killed all thim animils in me systim. Afther brakefust," ye say, "Oi giss Oi'll be takin' me lave—an' thank ye very much," ye say.

"Why, me man," says Doc Antiseptikus, "ye haven't aven seen Doc Licocky yit," an' he says, "we haven't diagnosed ye case yit. Th' male that I ordhered," he says, "is what we call a tist male. In two hours, we poomp it out wid a stoomack poomp, an' subjec' it," he says, "T' a chimikil examinashun," he says, "T' detarmin," he says, "what chimikils illimints ar-re missing frim y' gasthric juices," he says.

Thin ye probibly wud rach f'r y' clothes —an anny handy insthrumint iv battle, such as a watter pitcher or a bid slath an' make f'r th' door-r. Iv th' poomp you out, wanst ye had that male in ye—and it settin' well—Oi bet th' wud have t' bate th' wor-rlds record to Ar-rchey Road," concluded Donley.

"An' yit," mused Hennessy aloud, "Iv

ye had lit thim wor-rk an me long enuff, Oi bit th' wud iv found out what ailed me. Th' sure was invistigatin!"

"Dootless, dootless," assented Dooley amiably. "The post mortim wud a beein most inthristin t' th' docthurs, and most gratifyin' an' satisfyin' t' y'r friends an' fambly; but Oi can't figger where ye wud have had anny fun comin' t' you in th' pirformince."

Caesarean Section: Report of a Case.

By Dr. Annie L. Alexander, Charlotte, N. C.

The period at which Caesarean section was first resorted to is not known. It was practiced by the Greeks after the death of the mother. Pliny says that Scipio Africanus and Manlins were born this way. Many celebreties have been supposed to have been born this way; amohg them were Aesenlapiner, Julius Caesar and Edward VI of England. Tradition is without proof in regard to the latter two. Among the Romans it was decreed that no pregnant woman should be buried until the foetus had been removed. The Roman church has always been a strong supporter of the operation. In the middle of the 18th century the King of Sicily condemned a physician to death for neglecting to practice it.

Shakespeare tells us that

> "McDuff was from his mother's womb
> Untimely ripped "

The history of the operation extends over three periods.

The first from earliest times to 1500. During this time the operation was done occasionally after the death of the mother to save the child.

The second period extends from 1500 to 1876 when Porro described his method of amputating the pregnant uterus.

In 1500 Jacob Mifer of Switzerland, who was not a physician, successfully operated on his wife after she had been given up by midwives and barbars. This was probably a case of extrauterine pregnancy.

The first authentic Caesarean Section was done in 1610 by Gautman of Wittenberg. Following this it was occasionally done up to 1777, when it became eclipsed temporarily by symphyseotomy. During this period the uterus was simply incised and the child extracted. The uterine walls were not sutured. Most of the women died from hemorrhage or infection. Sutures were first used in 1769, but did not come into general use until Sanger's article appeared in 1882. Before the works of Porro and Sanger, the mortality was appalling.

The third period began with 1876 when Porro advised amputation of the body of the uterus. This became very popular.

Sanger in 1882 revolutionized the Caesarean operation by urging the employment of Uterine Sutures. As the uterus was not sacrificed in this operation it was designated the conservative in contradistinction to the Porro Caesarean section.

With increasing surgical technic more and more satisfactory results were obtained from the conservative operation while the Porro became less popular.

The most frequent and important indication for Caesarean section is afforded by contracted pelves. With a conjugata vera of 5 cm. the birth of a child cannot be effected by any other means. 7.5 cm. does not permit spontaneous delivery except after craniotomy. When the conjugata vera measures not less than 6.5 cm. a small child may be delivered after symphyseotomy. The thought of craniotomy on a living child is so repugnant that I would never do it. The operation under the most favorable conditions is not devoid of danger.

Pelvic deformities involving the superior strait are not the only indications for Caesarean section. Abnormalities of the pelvic outlet call for it. A bisischial diamefer of 7 cm. and less is a positive indication.

Pelvic tumors obstructing the pelvic canal render Caesarean section imperative. Carcinoma of the cervix and certain cicatricial tissue of the cervix and vagina call for this operation.

The operation is contraindicated when the mother is infected, in poor condition and in surroundings which render an aseptic operation impracticable. When the woman has been in labor for hours, subjected to repeated examinations by one whose technic is questionable, the operation is usually contraindicated. If it is decided upon under these conditions hysterectomy should be performed.

The question of rendering the woman sterile, to prevent future pregnancies, when there is an absolute indication is one to be considered.

It is best to tell the patient the dangers of future pregnancies and the dangers of doing more than the conservative operation, and let her decide whether she will have herself made sterile or not, as there are on record reports of four or five operations on the same woman. Statistics of Abel, Bar and Caruse show that 43 women had been operated upon two or more times without a death.

My patient was a woman 32 years of age, a chondrodyrtrophic dwarf, with evidences of rhichitis; 4 feet, 2 inches tall; 7 months pregnant when she came under my care. There was general contraction of the pelvis with a flattened antero-posterior measurement. The conjugata vera was only 5 cm. It was recognized at once that spontaneous delivery was impossible and Caesarean section was decided upon. The time elected was to be a few days before the end of the 40th week. Labor pains came on in the 35th week, requiring repeated doses of morphine to hold the labor in abeyance. Every day or two she required from one to three ¼ grain doses of morphine. Fearing that real labor would set in during the night or at some inconvenient time and deeming it inadvisable to continue the morphine, I decided not to delay the operation further. At the end of the 37th week, October 19th, I sent her to the Presbyterian Hospital where she was prepared for the operation for the next day. The abdomen was scrubbed with soap and water, shaved, disinfected with bichloride and a compress wet with bichloride put on over night. Just before the operation the abdomen was re disinfected with bichloride, painted with tincture of iodine, washed with alcohol and sterile water. An incision was made in the median line extending four inches above the umbilicus and about six below. The uterus was quickly delivered, enveloped in warm sterile towels. The abdominal incision was well covered with towels to protect the intestines and to prevent entrance of fluids into the cavity.

The uterus was steadied by an assistant Another assistant grasped the uterus around the cervix to control hemorrhage. An incision was made four inches long, extending from fundus down, in the median line. The membranes were ruptured, the child was seized by the foot and quickly delivered. The cord was clamped and cut and the child handed to a nurse who soon had it crying. Less than two minutes elapsed between beginning uterine incision and delivery of the child. Fortunately the placenta was located to one side. It was easily separated and removed The uterus was a little slow in contracting. It was packed temporarily with sterile gauze which was removed after the sutures were put in. The os being patulous no dilatation was necessary and no drainage was used. The uterus was sutured with catgut. The deep sutures went through the muscularis avoiding the mucosa. The superficial sutures brought together the peritoneum and upper layers of muscular fibres. The uterus was returned to the cavity and the abdominal wall sutured in the usual way, the wound dressed and the patient returned to her bed in good condition.

The hemorrhage was no more than the average woman looses in a normal labor.

This woman was not made sterile. I put the facts before her and left it with her to decide. She asked that the conservative section be done and nothing else.

The patient made an uneventful recovery, leaving the hospital at the end of the third week.

The child died 4½ hours after birth.

Gastro-Enterostomy.

By Dr. J. Rusell Verbrycke, Jr., Washington, D. C.

I have been stimulated to write a short paper on gastro-enterostomy by an article on the subject by Dr. Brenizer which appeared in the Charlotte Medical Journal, November 1911. I think that in some of his introductory statements he is at fault and also that the indications for the operation as laid down by him are far too broad.

Physicians for a time regarded gastro-enterostomy as more or less of a cure-all for gastric disease and many affections were so treated, when now, in the light of riper knowledge, other means would be chosen. Now, the profession is coming to have a pretty clear understanding of the definite indications for the operation and the best of both medical men and surgeons agree fairly well in advising for or against gastro-enterostomy.

It is true, as Dr. Prenizer remarks, that "earlier most stomach troubles were thrown into a pot labelled Catarrh of the Stomach." This is even the case with many practitioners today but not with the gastro-enterologist or the careful internist. In no class of cases is it possible to make a more positive diagnosis of the condition or conditions present than in diseases of the stomach and once this is done the indications for medical or surgical treatment are very clear.

Too few men realize just what good gastro-enterostomy will do for the patient when indicated and what harm when not indicated. The writer has never been fond of the operation and believes that with the exception of one class of cases it should not be employed when it is possible to adopt other proceedures. The artificial opening is not what was intended by nature and her plans of the body should not be altered unless necessary.

Reports upon the condition of secretion and motility after gastro-enterostomy are not very numerous and some of these are rather conflicting. Schuler,[1] after examining 40 patients sometime after operation, comes to the conclusion that the operation answers the purpose for which it is performed but that there is always a disturbance of gastric digestion. Dunham[2] examined 15 of his 48 patients both before and after operation. Strange as it may seem hyperchlorhydria had actually increased in three cases. Hyperchlorhydria had disappeared in three cases. Three cases of hypoacidity showed an anacidity. One case of hypoacidity became hyperacid and diet had to be arranged to cut out fruits, etc. Bile and duodenal juice are usually found in the stomach for varying lengths of time after operation.

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[1] Schuler, Mittenburger ans den Ganzzeberter di Med. und Clin., XXII, No. 5.

[2] Dunham, J. A. M. A., Vol. 55, p. 1777.

On the whole it seems that the egress of food from the stomach is hastened by the operation But it has been shown by radiographic examination that the contents do not leave the stomach by gravity alone, but in a manner somewhat approaching that which usually occurs at the pylorus. It has even been claimed that the new opening acquires somewhat of a sphincteric action. It has also been demonstrated by x-ray in dogs that unless a stricture be present at the pylorus, or the opening be rendered impassable by closing at the time of the operation, a large part of the food will leave by the pylorus instead of the new aperture.

The average immediate mortality following gastro-enterostomy is not as low as we would believe after reading of the results secured by the leading surgeons. Their series boast of a small mortality of but 2% to 3% but there are comparatively few surgeons in this class and the majority of the operations are done by the "lesser lights." Lockwood, in a most instructive article on "End Results in Gastric Ulcer," has estimated from statistics that 6 per cent. to 8 per cent. of patients operated upon by the average surgeon die as the immediate result of the opsration and that when other proceedures are done at the same time the mortality mounts to 12 per cent.

Those cases which do best after gastro-enterostomy are those in which actual benign obstruction is present at the pylorus. The results seen in the rapid rebound of these patients to health is often spectacular. This class of cases with the exception of irremovable carcinoma and seme duodenal ulcers constitute, to my mind, the only indication for simple gastro-enterostomy. In an unhealing ulcer at the pylorus in an individual of the cancerous age a resection of the pylorus is advisable either without gastro-enterostomy or with closure of the upper wound and a gastro-enterostomyr The medical man should share responsibility with the surgeon and encourage him to run the risk of a couple of per cent. higher mortality for the sake of ridding the patient of the not inconsiderable chance of malignancy either already being present or later developing.

When an ulcer. which is not producing obstruction or is away from the pylorus, does not do well under medical treatment we then try duodenal feeding and if then a cure is not effecled it is time for surgery. But, since statistics show that gastro-enterostomy does not produce its best results in these cases, some proceedure as excision or turning in as advocated by the Mayos should be practiced.

My friend, Dr. Clark, has recently presented to the Clinico-pathological Society the results after stomach operations on 32 of his patients. His results correspond with the statistics from the large clinics. The cases with benign stenosis, almost without exception. did well and are today enjoying good health, at maximum weight and able for the most part to eat anything. Those in whom ulcer was found at a distance from the pylorus did poorly and many now are not free from digestive disturbance. The neuroses and atonic conditions were all made worse by the operation.

A considerable number of Dr. Clark's patients I saw with him and I can emphasize the value of his findings. We would never countenance operation in the relaxed asthenic conditions which are accompanied so often by a train of neurotic symptoms. Because there is a large atonic stomach is no reason for performing gastro-enterostomy on the assumption that the stomach will empty quicker. One patient whom Dr. Clark and I saw was the most pitiable object after an ill advised operation. He dogged our footsteps for weeks seeking relief from the aggravation of his symptoms. Treatment of all kinds was of no avail and he finally disappeared from our notice. In Dunham's series it is interesting to note in looking over the tables that every one of his neurotic cases was made worse by operation. Ulcers at the pylorus but not producing obstruction were cured in one-third of the cases, improved in one-third and unimproved in one-third.

Gastro-enterostomy is not indicated simply because one or several severe hemorrhages have occurred from the stomach, even though recurring over a considerable period of time so as to suggest a chronic calous ulcer. A definite clinical entity has recently been described by several observers, many cases being reported by Hale White and by Sutherland[3], which presents all of the cardinal symptoms of ulcer, pain, vomiting and hematemesis. This condition, gastrotaxis, is not rare, and indeed it has been said that almost all of our ulcer statistics are erroneous because of the admixture of a considerable number of these cases. The writer has seen a half dozen in which he has made the diagnosis but has not been able to prove it except by the results of treatment. Most careful observance is necessary in differentiating ulcer and gastrostaxis but it is of the utmost importance that it be done, as the latter are very poor surgical risks, as high a mortality as 50 per cent. having occurred in those cases in which gastro-enterostomy was performed.

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[3] Sutherland, The Practitioner, April, 1910.

In closing I want to emphasize that gastro-enterostomy is most valuable in cases of benign obstruction of the pylorus and certain cases of duodenal ulcer as well as a palliative in irremovable carcinoma, but that here its usefulness ends unless other proceedures are instituted at the time and that it is not only unindicated but absolutely harmful in atony and the gastric neuroses.

I believe with Hartel[4] that a thorough course of medical treatment should follow every gastro-enterostomy and think that if this were done, instead of the patient being lead to believe that he could indulge himself to quite a degree, with the idea that the operation had accomplished by itself a perfect cure, even better results could be shown by gastro enterostomy than are at present attained.

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[4] Hartel, Deutsch. Zeitschrift fur. Clin., April, 1911.

Caesarean Section: Its Field of Usefulness in Abnormal Obstetrics.*

By J. P. Proctor, M.D., Athens, Ga.

Mr. President and Gentlemen of the Eighth District Medical Society.

I beg to lay before you today some views upon a subject which is claiming the attention of general surgeons and obstetricians. I claim no priority of thought for this paper because others far more renowned than I have preceded me in writing upon this subject.

My object in choosing this subject is to see if I cannot awaken in your minds some of the convictions that have long since come over me and I ask you in all sincerity to deal frankly with my humble attempt, for, to my mind, the greatest good which we derive from such meetings as this lies not so much in the papers read as in the discussion which follows.

By Caesarean Section we mean delivery of the foetus by means of incisions through the abdominal and uterine walls of the mother. No doubt, all of you are more or less familiar with the history of this operation. How, in the earliest period, the Roman law required that it be performed upon women dying in the last few weeks of pregnancy. Apparently the first Caesarean Section upon a living woman is reported by Caspar Bauhin as having been done by one Jacob Nufer, a castrator of pigs, at Sigerhausen Switzerland, upon his own wife, "after the midwives and barbers in attendance had given her up," and of its success there can be no doubt, as this woman had five spontaneous labors later. This was about 1503, and as early as 1581 papers were written upon it and cases reported, but probably the first authentic Caesarean Section by a surgeon was done by Trautmann, of Wittenberg, in 1610.

From this time until 1769 it was occasionally done upon the living woman, but with appalling fatality, because the uterine incision was left unsutured and ignorance of the causes of infection left the patients to die of hemorrhage and sepsis. Uterine sutures were first employed by Lebas in 1769, but it remained for Sanger to raise the operation to the plane where it could claim the attention of surgeons because of its true merit. Coming to the assistance of Sanger and the uterine suture the discovery of the "germ theory of disease" and its relation to sepsis, elevated still higher the plane of Caesarean Section, until now it occupies a position equalling that of any other abdominal operations as regards safety.

We all admit that in cases where the mother's life is at stake, Caesarean Section is a justifiable, even more, an advisable procedure. I contend that we should not wait to perform it as a last resort to save one life where two are at stake, and that we should use it more often in order to preserve the future health as well as the lives of these patients, who place themselves in our hands with the implicit confidence seen only in the relation of patient to physician,

The fact that now, more than ever before, medicine and surgery have for their object the preservation of health in addition to the saving of life, has led me to considerable thought along the line of Caesarean Section. In the infancy of our great profession, abdomens were opened and skulls trephined under the crudest of surroundings, with no idea of asepsis, but always with the hope of saving a life. As civilization mounted higher and higher with steady strides, medicine and surgery advanced with wonderful bounds, passing from trade to profession. Instead of "reading medicine" and serving an apprenticeship under older physicians to obtain our medical educations, we now must first become well versed in letters and then study in regular medical schools, which are equipped with every facility for teaching, for a legally prescribed course of four years, obtain a diploma and pass examinations before state boards of medical examiners before being allowed to practice our profession. And even then our education is not considered finished unless we have spent at least one year in hospital work. The "old-time doctor" with his saddle bags and home made remedies for healing the sick has passed into history except in the most rural districts. To take his place there has come the modern physician, with his improved methods of diagnosis and treatment, and his great aim to keep people well equalling his desire to get them well when they are sick. To aid him he has specialists in every line, combined with health boards, municipal, county, state and national, whose cry is "preventive medicine."

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*Read before the Third Annual Meeting of the Eighth Congressional District Medical Society of Georgia, held at Monticello, Ga., August 17th, '10.

And far outstripping medicine in progress is surgery. Aided by perfectly equipped hospitals and, above all, the discovery of the germ theory of disease, with a mighty bound it has forged ahead of all other professions—almost reaching the state of an exact science within a quarter of a century. So that now we no longer operate only to save life but to preserve health as well. And it is the combination of these two aims that prompts me to present this paper on Caesarean Section:—Save the life of the mother and unborn child and, equally as important, preserve their health that they may be useful members of society.

I venture to say that aside from gonorrhoeal infection, abnormal labor is the largest factor in the production of invalids among women and fatality among children at birth. And to this the gynecologist owes the wealth of his harvest. How many of us have among our patients women comparatively in the bloom of youth, so far as years go, but crippled for life by perhaps one hard, long labor, in which they have striven to do their duty and perpetuate their race. A child too large or a pelvis too small, an abnormal position of the foetus or some mechanical obstruction to the happy termination of labor, a "true conservative" who has dozed quietly by and left "nature to take its course" or an over-anxious forceps obstetrician, who sets in with his instruments "to spare the woman further suffering" and tear her vaginal walls and perinaeum into ribbons. The result of such obstetrics is that afterward these women come to us with a train of vicious symptoms:—backache, headache, weakness, disordered menstruation, weight in the pelvis, languor, abortion. They give a history of perfect health until a certain confinement in which the child was only delivered after a long, hard labor or "finally had to be taken." Examination reveals a uterus subinvoluted, displaced, with torn, everted and eroded cervix, dragging upon weakened ligaments; endometritis, with a resulting irritating leucorrhea; perinaeum torn in any of a variety of ways and all support of the pelvic organs destroyed; cystocele; inability to control urination or to completely evacuate the bladder. Only operation can cure the physical side of such cases, while the nervous and mental condition often follows them to the grave.

It is in the prevention of these cases that Caesarean Section finds a field of usefulness. I do not tell you that every pregnant woman must have her abdomen opened in order to be delivered of a foetus, or that no babies should come *per viam naturalem*, but I do tell you that in a certain class of cases nature unassisted is a poor obstetrician, and that the obstetrical forceps, in the majority of instances, is a dangerous form of assistance.

Indications.—Contracted pelvis, where the true conjugate is from five to nine centimeters; over-developed foetus; malpositions; vicious presentations; when the head has not engaged in the pelvis after one hour of strong, second stage pains; bony obstructions to the pelvic inlet or outlet, fibroma or myoma so placed as to obstruct labor; carcinoma of the uterus and eclampsia complicated by undilated and rigid cervix.

Contraindications.—Dead foetus; the presence of infection in the mother or when she is in bad condition from other causes; such surroundings as to render an aseptic operation impossible, and after repeated vaginal examinations by a person whose technic is questionable.

From the standpoint of choice of an operation where interference is necessary, I prefer Caesarean Section to either forceps, version, symphysiotomy, or craniotomy. In comparison with forceps I choose it because of the dangers to both mother and child from the use of this instrument, not alone as to life but health as well, so often is it accompanied by lacerations, bruised and contused soft parts of the mother and cranial injury to the child. This, combined with the fact that in its use, as in the practice of version, symphysiotomy and craniotomy, one of the chief difficulties is inability to secure and maintain asepsis of the vulva and genital tract, makes it, in my opinion, an exceedingly dangerous instrument.

As to the safety to health and life of both mother and child, version is a dangerous operation except under the most favorable conditions. Within the last six months I have seen the lives of two perfectly healthy children sacrificed by attempted version, and the lives and health of the mothers endangered, when, had Caesarean Section been resorted to, both could have been saved. In one instance, there was full extension and the head could not engage in the pelvis, and in the other the position was transverse, with the prolapsed arm and hand protruding from the vagina. Deep chloroform anesthesia was used, but both uteri remained tetanically contracted. The operation required one and a half hours in each case. One child died before delivery and the other was resuscitated after two hours work, only to die within fourteen.

Craniotomy should never be done except upon a child already dead or in the presence of one or more of the contraindications to Caesarean Section. In this time, when the tendency leans so strongly toward race suicide, it should be malpractice to sacrifice the life of a healthy, full-term child if there is any possible way to avoid it. And numbers are uselessly sacrificed and the matter passed over with a single word of excuse, "still-born."

Symphysiotomy, because of its lack of practical value, is well nigh obsolete and should remain so.

It is a misconception to think that Caesarean Section should never be done upon a woman because she has before been delivered naturally of a child or children. There are cases in which malposition of the foetus may render it impossible of natural delivery without great danger to its life or to the life and health of the mother. It may be easily and wisely done and the mother be delivered spontaneously of other children.

The operation of Caesarean Section is done in several ways, the choice of which lies with the surgeon. The course I have followed in three cases, with perfect results, is this: I cleansed and sterilized the abdominal wall just as I would have done for any laparotomy, made a median incision about eight inches long through the abdominal wall, exposed the uterus, around the lower segment of which I placed a rubber tourniquet, the pressure of which was regulated to control hemorrhage. With the uterus delivered from the abdominal cavity, I then made an incision, parallel with the median line of the body, across its fundus and down the anterior wall to an extent sufficient to extract the child. The cord I secured by two clamps and divided between, and turned the child over to an assistant. I next rapidly peeled off and extracted the placenta, and closed the uterine wound with two rows of sutures, one of No. 2 chromic catgut placed deeply in the musculature, the other of No. 1 chromic catgut was superficial. I then removed the tourniquet, sponged all blood from the abdominal cavity and closed the abdominal wound with silkworm gut.

In these three cases all of the mothers and two of the children were saved. The child lost was delivered in the seventh month of a tubercular thirteen-year-old girl with a generally contracted pelvis. One of the women has since given birth to a normal nine-pound baby and suffered no ill results. The other two have not conceived again, although their generative organs were left unmolested.

One case was done for contracted pelvis; one for malposition of foetus, and the other for puerperal eclampsia.

The operation as described above, should easily be done in thirty minutes and should be no more dangerous than any other abdominal operation when properly done upon a clean case. Two and a half to three weeks confinement to bed is as long as necessary.

For Caesarean Section I claim the following advantages: 1st, It practically obliterates foetal and maternal mortality when done under favorable conditions; 2nd, the ease with which asepsis may be secured and maintained; 3rd, it leaves the pelvic organs, genital tract and perinaeum of the mother in perfect condition; 4th, it shortens the duration of labor in abnormal cases; 5th, the woman may easily be rendered sterile when there exists any condition making normal delivery permanently impossible.

Headache: Its Causes as Related to Abnormal Conditions Existing in the Eyes, Nose and Accessory Sinuses.*

By R. S. Cauthen, M. D., Charlotte, N. C.

Statistics show that of all headaches, 10 per cent. are due to a refractive error or faulty muscle condition of the eyes, and of all *rontal headaches*, 75 per cent. are due to *eye strain*. Every practitioner is at some time called upon to relieve a headache which does not yield to *any* form of treatment except temporarily, and then only to narcotics and opiates, to return as soon as the effects of the drug have worn away. There is too great a tendency on the part of most of us to treat the *symptoms* of headache instead of the cause. As stated in the subject of this paper, only headaches as they result from faulty condition of the eyes, nose and accessory sinuses will be considered. Fully realizing that there are numerous causes for headaches, other than those mentioned, the other causes are left for discussion by the gentlemen on other branches of medicine. The frequency with which the eye element is met has been mentioned above. Errors of refraction, especially those accompanied by *astigmatism*, and I might say those of slight degree of either a regular or irregular type, and also where the astigmatism varies in degree in the two eyes, and where the astigmatism has been only *partially* corrected, are the conditions which cause headache very frequently.

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*Read before the Seventh District Medical Society, held in Gastonia, N. C., December 5th, 1911.

Heterophoria (or imbalance in the extrinsic eye muscles) is another frequent cause for discomfort in the head and eyes. Normal eyes lie in the same horizontal plane, but sometimes, due to imbalance in the relative normal strength or length of the superior and inferior recti, the eyes have a tendency to deviate from their normal plane and the effort exerted in the endeavor to maintain a proper relation often causes the most distressing symptoms which nothing can relieve except a properly selected prism in cases where the error is of small degree, and by an operation for its correction where the error is of considerable degree.

It sometimes happens, that after a careful and correct refraction, our patient continues to complain of pain in the eyes and head, a careful examination may reveal some form of herterophoria, which, if corrected in the manner just mentioned, always gives relief. We should not be satisfied with an examination of the refractive condition and of the muscles, but should examine the inner eye as well, for here one can often discover conditions such as: Nephritis, brain tumor, glaucoma, cataract, (that is the second stage in which headache is caused by increased intraocular tension), all of which it is important to diagnose early. But please remember that *every* error of refraction or case of herterophoria does not cause headache, neither does the fact that a patient who has normal distant vision prove that he has no eye strain.

Next we wish to call attention to abnormal conditions in the nose and accessory sinuses which contribute very largely as etiological factors in the matter of headache. When any condition exists in this region which inhibits free drainage of the secretions from the frontal, sphenoidal and maxillary sinuses and ethmoidal cells, there is practically always headache resulting. This applies more particularly to the frontal sinuses, as too much importance cannot be attached to the high probability of the sinusitis causing headache. A deflected nasal septum causing pressure upon the turbinals which are usually more or less swelled causes occlusion of their openings, and the pressure within these cavities is so increased that headache results. Polypi, spurs and ridges in this region also produce the same effect.

A few words in conclusion which will assist us in differentiating between headache caused by eye strain, and reflexly from abnormal conditions in the nose, and those caused by general or systemic conditions: If there be supra-orbital, deep ocular, temporal or fronto-occipital pain which is present during, or for a short time *after* using the eyes, but ceases upon rest of the eyes is almost certainly due to eye strain. On the other hand unilateral pain or hemicrania increasing with the taking of cold, or lasting during the night after the eyes have been at rest, is *not due* to abnormal eye conditions, but to some systemic or other *local* condition in the accessory nasal sinuses or cells.

Functional Activity of the Kidneys.

By J. W. Squires, M. D., Charlotte, N. C.

Previous to the advent of the cystoscope little attention was given to the study of renal function. Palpation, percussion, and ordinary urinalyses were the factors upon which we depended for our diagnosis. Operations upon the kidney and lower urinary tract were considered safe when these factors revealed nothing contradictory. However, in some cases, it has been observed that although our surgical procedure was successful, that complications often set in which rendered hopes for our patients recovery very slight, or produced death. The complication most often occurring was found to be renal failure or uremia. Looking for some means of warning us of renal conditions contradictory to operation we found, that in a number of cases ordinary urinalyses were not sufficient. Functional activity tests were then introduced to ascertain as near as possible the actual amount of work a kidney is capable of doing.

The renal functional tests most widely known and of sufficient merit to be considered are the following:

1st. The study of urea excretion. For this to be of value, the diet must be controlled and the total amount of nitrogen contained in the food estimated. Yet having determined this the test is still unsatisfactory, because the changes taking place in metabolism are uncertain. For this reason the estimation of renal function by the study of urea excretion, and all other tests depending upon metabolism are unsatisfactory. This however does not exclude urea as being without value. If the urea excretion is normal or certainly not very low the renal activity should be regarded as good; but if the excretion is low we should look for renal insufficiency and use other functional activity tests, which are more reliable, to determine the extent of the lesion. To sum up: Urea excretion should be used only to determine approximately renal function and as an indicator to call for more reliable tests.

2nd. Indigo Carmine. We know that when this drug is injected it is excreted by the kidneys as a blue coloring matter.which usually appears in the urine in about twenty minutes. The excretion is complete in twenty-four hours. Delayed time of appearance and prolonged elimination indicate renal insufficiency. The disadvaniages of this drug are that it is not adopted to colorimeteric readings, the excretion is prolonged over a long period, and only about 30 per cent. is excreted by the kidneys.

3rd. Methylene Blue. Following subcutaneous injection this usually appears in the urine in about 15 to 25 minutes. The elimination extends over a period of 36 to 48 hours. In renal insufficiency the time of appearance is delayed and the elimination is prolonged. As a rule, in acute nephritis, the excretion of methylene blue is normal. About 50 per cent. of the dye is normally excreted by the kidneys. This test is subject to the same objections as the previous one.

4th. Rosaniline. Following subcutaneous injection this drug appears in the urine in 15 to 30 minutes. The total elimination extends over a period of about twenty-four hours. The quantity eliminated varies widely. I have had no experience with this drug.

5th. Cryoscopy. Urinary cryoscopy consists in determining the relation of the freezing point of the urine to that of the blood. In health the freezing point of the blood is about 0.56° C., while that of the urine ranges from 1.20° to 2.00°. In renal disease the molecular concentration of the blood is increased, therefore, the molecular concentration of the urine will be lowered. With these facts as a basis the variation in the freezing point of the urine and the blood is studied to determine renal function. In health the freezing point of the urine is subject to wide variation. For this reason cryoscopy of the urine occupies a limited field.

6th. Phloridizin. This drug possesses the peculiar property of producing a temporary glycosuria. After an injection of 5 mg. a healthy kidney excretes from .5 to 2.5 grams of sugar. In renal lesion the excretion is reduced. This test tends to exaggerate the gravity of the lesion and for this reason is unsatisfactory.

The various tests mentioned above have been used very widely and in each case found to be unsatisfactory. I have stated a few objections, and many more could be enumerated. For the sake of brevity we will dismiss this and discuss a test which has recently proven itself to be reliable and satisfactory. The one I refer to is the Phenolsulphonephthalein test as reported by Dr. Geragthy of Baltimore.

Phenolsulphonephthalein is a red crystalline powder which is used in an alcoholic solution so that 1 cc. contains 6 mg. of the drug. For the sake of accuracy this drug is now sold in small ampoules containing about one and a half cc. This prevents evaporation of the solution. At first it was sold in bulk and a great many times the bottles being insufficiently corked, resulted in a solution varying in strength. This caused different investigators to obtain results which varied widely.

The technique of the test is as follows: The neck of the ampoule is marked with a small file and broken off. The drug is then drawn up into a syringe graduated in cc's; and 1 cc. is accurately injected subcutaneously, intramuscularly or intravenously. The patient previous to this is given two glasses of water to insure a good secretion. The time of injection is noted, the bladder emptied and the time of the appearance of the drug in the urine is observed. It is not necessary to catheterize unless the patient is unable to empty his bladder. Usually after the injection is given the patient is told to empty his bladder and in ten minutes to void a small amount again. By this time in the majority of normal cases the drug will be found in the urine. It is detected by rendering the urine alkaline in reaction. If the patient is unable to empty his bladder a catheter must be employed.

Phenolsulphonephthalein when injected produces no evidence of irritation. In large doses it is non-toxic, produces no change in the cells of the kidney, nor disturbs renal function in any way, (Geraghty). Phthalein is carried to the kidneys by the blood and excreted in the urine to which it gives a red color. Normally the excretion extends over a period of about six hours, during which time about 99 per cent. of the drug is excreted. This drug is easily detected in the urine by the addition of a few drops of an alkali. The normal kidney in the first hour after injection excretes from 40 to 50 per cent., in the second hour 20 to 25 per cent. In renal disease the excretion is reduced according to the extent of the kidney substance involved. The advantages of this drug are that it is non-toxic, the quantity eliminated by a normal kidney is constant, it gives a delicate response to renal lesions, quantitative estimation of the amount excreted can be readily made by means of the colorimeter.

Dr. Geraghty in his latest report states that in acute, chronic parenchymatous, and chronic interstitial nephritis, the excretion of phthalein is reduced.

In chronic nephritis, particularly, phthalein gives very valuable information. Here diagnosis of impending uremia may be made by means of the phthalein test where it is probable the urinary examination would show nothing. In passive congestion of the kidney, as a result of a cardiac lesion, phthalein shows a decrease in renal function. As the heart lesion improves the excretion becomes better. A large number of medical diseases have been studied with reference to phthalein, but none produce any reduction in the excretion unless there is renal involvement, (Geraghty). The blood pressure, whether it is high or low, bears no relation to the output of phthalein. There are cases of high blood pressure in which phthalein is markedly reduced; in other instances of low blood pressure the phthalein output has proven to be normal.

The Test from a Surgical Standpoint.

We have observed that in operations upon the kidney and lower urinary tract, renal failure has caused a large number of deaths. In a number of these cases the urinalysis revealed nothing contradictory to operation. Here the renal activity test would have informed us more exactly of the functional ability of the kidney. If found to be reduced, by delaying the operation it is possible for the function to be improved. In cases of this kind a number of phthalein tests should be given to see if the function is at a stand-still or improving. If we find the function varying a great deal from time to time, we must defer operating until future tests show the function to be fairly constant, or in other words until a functional equilibrium is established.

Before operative procedures in prostatic hypertrophy phthalein is very valuable, especially when there is a considerable amount of residual urine. If this condition persists for a length of time, the pressure of the urine in the bladder produces a dilatation of the ureter, then the pelvis, and on account of the urinary stasis the excretion is interfered with, and finally the secretion. In instances of this kind by the usual preparatory treatment, that is, the introduction of a retention catheter into the bladder or at regular intervals drawing off the urine, and regulating the patient's diet, the renal function will improve and become constant as will be shown by the phthalein test. In other words the kidney becomes accustomed to the new changes in pressure brought about by keeping the residual urine reduced and its functional activity becomes constant and a phthalein equilibrium established. This is sufficient evidence to justify operating, as no danger would attach in so far as renal complications are concerned. For the past two years Dr. Crowell has been using this test in all of his prostatic cases, and it is our rule never to operate until the phthalein shows up sufficiently well to justify this procedure, and in all cases in which the output was good recovery has been uninterrupted. In one case where the phthalein output was low, against his better judgment, he operated, on account of the extreme condition of the patient and pressure brought to bear. This resulted in the death of the patient from uremia.

In surgical procedures of the upper urinary tract, especially the kidney, phthalein excretion is studied by means of ureteral catheterization, collecting the urine separately from each kidney. By this means if it is desired to operate upon one kidney, we determine first if the other kidney is healthy and to what extent hypertrophied and its function increased as a result of the lesion in the opposite kidney. Normally each kidney should excrete about 20 per cent. of phthalein in one hour. In renal lesions the excretion varies according to the amount of kidney substance destroyed. The following case in which one kidney was suspected to be diseased demonstrates the value of phthalein. Uretheral catheterization was performed, phthalein injected, urine collected for two hours. The right kidney during the first hour put out 38 per cent., the left kidney 5 per cent. Nephrectomy was performed and subsequent phthalein test six weeks later revealed the fact that the remaining right kidney was excreting 48 per cent. in one hour, while prior to the operation only 43 per cent. was being excreted. The function of the remaining kidney improved after the operation.

On another case which has recently fallen into our hands the functional test has been of value. The patient, male, age 35, anaemic, complains of scarcely any symptoms except passing blood in the urine, occasional colicy pains in the lower abdomen and at times nauseated. A cystoscopic examination was made. The bladder was practically normal in appearance. The urine from the left kidney appeared to be normal, while coming from the right kidney blood could be distinctly seen. Next ureteral catheterization was performed and the urine collected separately. Microscopically the urine from the left kidney was normal, while that from the right contained blood and a few leucocytes, and no bacteria. A phthalein injection was given. Each kidney excreted 20 per cent. which shows that the secreting portion of the kidneys is normal. So far no diagnosis has been made, but it is evident that the pelvis of the kidney is the seat of the lesion.

In the preceding paragraphs of this paper I have mentioned the ordinary functional activity tests and have attempted to eliminate the ones which are unsatisfactory. The phthalein test has been emphasized as the most reliable on account of its peculiar properties, a few of which have been mentioned.

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Congenital Morphinism, with Report of Cases.*

By Geo. E. Pettey, M.D., Memphis, Tenn., Member Memphis and Shelby County Medical Society, Tennessee State, Tri-State, Mississippi Valley, Southern and American Medical Associations.

Comparatively few opium using mothers conceive and fewer still of the children born of such mothers live beyond the third day after birth. This high mortality among the infants of such mothers is not unavoidable, but, managed as they usually are, a large majority of children born to such mothers die on the second or third day after birth. This is due to the fact that the child's blood and tissues are as fully saturated with the narcotic as are those of its mother, in fact, so far as the physical elements of the addiction are concerned, the child is as much an habitue as is its mother. Severance of the placental circulation through which the child has been receiving the narcotic shuts off that supply, and if the drug is not administered to the child it suffers the shock and collapse incident to the abrupt withdrawal of opiates from an habitue. Few adults are able to stand such a strain, therefore, a newly born infant could not be expected to do so. Some infants born under such conditions, however, are managed so as to preserve their lives and a few of them have come under my care. Note the following cases:

In May, 1901, W. T. B. and wife came for treatment for morphinism, bringing two children with them. One a boy of three years, the other a girl one year of age. The mother was using morphine before the first conception and when the baby was born it was fortunately under the care of a physician who realized the danger of the sudden withdrawal of an opiate from such an infant and he gave paregoric in full doses for the first three days and then the baby was put to the breast and allowed to get its drug supply in that way. When this child was a year old an effort was made to wean it, but it was very fretful and suffered so severely that the mother says that she did not have the heart to deny it the breast and it was allowed to continue to nurse. Notwithstanding this, however, and notwithstanding the fact that she continued to use the opiate and that menstruation was absent, she conceived again and the girl was born two years after the boy. This child was managed in the same way as the first for the first few days after birth, and then both children were allowed to nurse. They both received their narcotic through the milk and the mother had not succeeded in weaning either of them. Therefore, they were brought with her for treatment.

The mother and children were prepared for the withdrawal of the opiate by active elimination, the opiate was discontinued, and they were given my usual treatment, the children taking the same remedies as the mother, but in relatively smaller doses. The children stood the treatment as well as the mother and all were brought out in good condition in a short time. Neither of the children were allowed to nurse after the treatment. The mother was much emaciated from the drain of nursing the two children, but her convalescence was rapid after the children were weaned and both the mother and the two children have remained free from their addiction. The children are healthy and vigorous and show no evidence of their former addiction. It has now been a little over ten years since these cases were treated.

In November, 1909, a Texas physician wrote, asking advice as to the management of his wife, whom he said was addicted to the use of morphine and was about seven months pregnant. Not being able to find anything in medical literature to guide him in the management of such a case he wished me to give him such aid as I could. Had the patient been near me I would have taken her off of the drug, even at that advanced stage of pregnancy, but a long railroad journey for such a patient made another course more expedient.

I wrote him that I thought we would be able to carry his wife through her confinement without complication and advised that the use of the opiate be continued without any effort at reduction. I also called his attention to the importance of keeping up active elimination, both by bowels and kidneys during the remainder of gestation and suggested suitable remedies for that purpose, to the end that the patient's system be kept in the best condition, and be as nearly free from toxic matter as possible at the time of her confinement. The only complications likely to occur being of toxic origin.

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*Read before the Southern Medical Association, Hattiesburg, Miss. Also before the Tri-State Medical Society, Memphis, November, 1911.

These suggestions were faithfully carried out and on December 30th she was delivered of a healthy child, at full term, in a normal labor. Six hours after the delivery the child began to show signs of restlessness and discomfort, and following the plan I had outlined it was given a drop of laudanum and this was repeated in half an hour. This did not give relief, and one hour later two drops were given at one dose. This gave relief and the baby was quiet for several hours, but when it began to show signs of discomfort again, three drops of laudanum were given at one dose. This proved to be a fairly effective dose and a dose of this size was given every six hours for the next two days. By this time the milk flow was fairly well established, but the supply was not abundant and the child did not get as much narcotic through the milk as it had been accustomed to before birth and it was found necessary to supplement it by the administration of two drops of laudanum three times a day in order to keep the child free from abstenance symptoms. When the child was a few weeks old an effort was made to discontinue these doses and depend upon the supply from the milk alone, but the child was very fretful and restless when these doses were not given, so it was thought best to continue them until the mother and child could be sent for treatment. This was done when the child was two months old.

Upon admission the mother was found to be using about ten grains morphine daily; the infant was nursing and receiving in addition to the quantity it obtained from the milk, from six to nine drops of laudanum daily. Both were prepared for withdrawal by thorough elimination and the drug discontinued at once in both cases. The mother was kept under the influence of hyoscine to a moderate degree for a couple of days and the child was allowed to continue to nurse. Within six hours from the time the administration of hyoscine to the mother begun, the child showed distinct signs of the effects of that remedy, but it was fretful and manifestly uncomfortable. At this time a dose of 1-1000 grain hyoscine was given to the baby, and this dose was repeated every four to six hours for the next 36 hours. By the end of the third day from the withdrawal, both patients were fairly out from under the influence of hyoscine and all other remedies and were comfortable, On the fourth day their condition was still more satisfactory and from that time on their convalescence was normal and uninterrupted. Neither of them suffered during the treatment to such a degree as to show it.

The Doctor, the husband and father, writes under date of November 4th, 1911. saying that both mother and baby are in good health and free from their addiction. He sends picture of the little girl who is now a hearty, robust child of two years.

Every child born of an opium using mother should be given an opiate for the first three days after birth. After that the milk may be depended upon to contain enough of the drug to satisfy the demands of the child's system, or if it is thought best not to allow the child to nurse the administration of the opiate should be continued until such time as the child is strong enough to stand the withdrawal. By this means their lives can be preserved. The results obtained by two mothers who have come under my care illustrates this point.

Mrs. M. J. came for treatment May, 1910. She had been taking McMunn's Elixir of Opium thirty-one years. Is the mother of 18 children, only the first two and the last one lived beyond the third day after birth. The first two children were born before she became addicted to the opiate. During the third pregnancy she was threatened with miscarriage and McMunn's Elixir of Opium was given to prevent it. During the last half of the period of gestation, the opiate was administered to her two or three times a day, and while it served the purpose of preserving the pregnancy it also fastened the opium habit upon her and she was not able to throw it off. The child was fully developed and apparently perfectly healthy, but on the day following its birth it began to show signs of illness, and it grew progressively worse and died 48 hours after delivery in convulsions. Neither the physician in attendance or the mother understood the necessity of giving the child an opiate and none was given; the death was attributed to unknown causes.

This pregnancy was followed by another within fifteen months, in which she was confined under the same management, with death of the child within three days after birth, and this pregnancy by another and another until this woman had given birth to fifteen while using an opiate habitually. All the children died within three days from their birth, most of them dying by the end of the second day. The same physician attended her in all these confinements and both the mother and the physician looked upon the death of the children as a natural consequence of the mother's condition and inevitable.

In her last confinement she was attended by another physician who appreciated the conditions under which the child was being brought into the world and understood the necessity of protecting it from the shock incident to the abrupt withdrawal of the opiate. In order to do this he gave paregoric in ten drop doses and these were repeated at such intervals as was found necessary to keep the child comfortable and free from abstenance symptoms. The child was not allowed to nurse, but the paregoric was kept up for a few months and then gradually discontinued. This child is now a stout healthy boy of 13 years, and the mother is firm in her belief that had the same course been pursued with her other children, they would have lived also. They were all well developed and apparently normal children and showed no signs of illness or discomfort during the first twelve hours after birth, but from that time on their illness grew rapidly and they either went into complete collapse or died in convulsions by the end of the third day after birth

A case which I now have under treatment gives a history which in some particulars is very similar to the above, while in others it differs greatly. This woman, Mrs. C. J. D., has been using morphine by the mouth forty-five years, during most of that time has taken with regularity 20 grains morphine per day. She was married in 1863, first child in 1864, premature, at 6th month of pregnancy. A second pregnancy soon followed which resulted in miscarriage at third month. The third pregnancy occurred in 1866. Miscarriage was threatened at second month and morphine was administered to preserve the conception. This was used occasionally to relieve symptoms for the first few months, but before gestation was complete the drug had been used daily for more than three months, by which the morphine addiction was established, but she was carried to full term and delivered of a normal child. The mother says that either from intuition or upon the advice of the midwife who attended her paregoric was administered to the child when it became fretful and this was kept up for several months before it was entirely discontinued. The child lived to be a grown woman.

After the mother's recovery from this confinement an effort was made to discontinue the use of the morphine, but without success and its use has been continued from that time until now. As she did not allow this child to nurse, another pregnancy occurred within a year and this was followed by others in rapid succession until eleven children had been born to this morphine using mother. She went to full term with all of them and none of the children died in infancy; six of them are now living and none of them show peculiarities which could be attributed to the condition of the mother at the time of their birth.

The same course was pursued in the case of the last ten children as in that of the first one that lived. An opiate was administered to them on the day following their birth, usually about twelve hours after birth. The mother says that about twelve hours after birth they began to show signs of discomfort and, as she understood what these symptoms meant, she administered an opiate and this was repeated at such intervals as was found necessary, and after the babies were a few months old, the opiate was discontinued by gradual reduction, and this was usually done without very much difficulty. None of the children were allowed to nurse.

One unique feature of this case is that no menstrual flow has occurred since the third pregnancy, the ten conceptions following that having occurred with out the appearance of menstruation at all. As a rule, the habitual use of opiates arrests menstruation, but from these cases it is quite evident that it does not always arrest ovulation, if indeed it does so at all. This woman passed the menopause without knowing when it occurred.

Concealed Morphinism in Parturient Women.

When a child is born of a woman whose habits are not known and the child appears to be healthy and normal in every respect at birth, but in the course of twelve to eighteen hours afterwards begins to show signs of discomfort, the symptoms taking the form of gastro intestinal disturbances with embarrassed portal circulation and these symptoms become progressively more noticeable from hour to hour, concealed narcotic addiction in the mother should be suspected and evidence of the existence of such condition diligently searched for. Narcotic addiction in the mother will often be found to explain this sudden, and otherwise unaccounted for, illness of the infant. When this condition of affairs is suspected, although the mother may not admit it, it is well to give the child an opiate, say one drop of laudanum. If this shows less than the normal effect, repeat it in half an hour, watch for effect again and if not seen, repeat until the child is brought fairly well under the influence of the opiate or until it is restored to the apparently normal condition which existed for the time immediately succeeding its birth. If the child is found to have an undue tolerance for the opiate, or if its effects restore an apparently normal condition instead of inducing narcotic sleep, the existence of narcotic addiction may be accepted as a fact and the case handled accordingly. If it is a narcotic case, as the effects of the narcotic administered begins to wane, the symptoms of distress will again make their appearance and nothing but a narcotic will relieve them and this should be given as in cases where addiction is admitted. Few mothers, however, will be found to stubbornly persist in denying their real condition when they are made to realize that the life of their child may depend upon their making their condition known at least to the attending physician.

958 S. 4th St.

Salvarsan in Malaria.—Iversen and Tuschinski (Deutsche Med. Wochenschrift) have investigated the action of salvarsan upon the malarial parasite. The first report was based upon five cases of tertian fever, in which they had given 0.4 gram of salvarsan intravenously with excellent results. In the present report, the authors summarize their experience in 61 cases, presenting a great variety of malarial affections in persons of various nationalities. The remedy was given intravenously, as well as by the combined method; namely, by following the intravenous injection two days later by an intramuscular injection of an alkaline solution. The dose given intravenously was usually 0.5, while intramuscularly 0.3 was injected. The following conclusions were reached by the authors as the result of their experience: Salvarsan, when introduced in a single dose of 0.5 intravenously, produces a specific action upon every variety of malarial parasite. In tertian fever, the parasites usually disappear after from 12 to 48 hours. The attacks cease. It is impossible to say, however, whether or not this effect is permanent. It is best to combine the intravenous administration of salvarsan with the intramuscular. In quartan fever the action of the remedy does not last, even after a dose of 0.8 gram. In the tropical form, doses from 0.5 to 0.8 can only produce a temporary disappearance of the ring-forms from the blood. The crescent form does not disappear, although it may become temporarily modified in shape and staining properties. In some cases of tropical malaria, a so-called contrary effect was noticed. After a temporary lowering of the temperature, a diminution or complete disappearance of the ring-shaped parasites from the blood, there takes place a distinct turn for the worse in the patient's condition, with a reappearance of rings and crescents in large numbers.

Danger Due to Substitution.

Hardly another of all the preparations in existence offers a wider scope to imposion under the plea of "just as good" than the scientifically standardized Eucalyptol.

The most recent fraud practical in regard to this product is an attempt to profit by the renown of Sander & Sons. In order to foist upon the unwary a crude oil, that had proved injurious upon application, the firm name of Sander & Sons is illicitly appropriated, the make-up of their goods imitated; and finally the medical reports commenting on the merits of their excellent preparation are made use of to give the desired lustre to the intended deceit.

This fraud, which was exposed at an action tried before the Supreme court of Victoria at Melbourne, and others reported before in the medical literature, show that every physician should see that his patient gets exactly what he prescribes. No "just as good" allowed.

"Elixir Saloform Comp., Flexner." Contains 20% alcohol. An efficient remedy for rheumatism, gout, cystitis and uric acid solvent. Prepared for physicians' prescriptions only. Robinson-Pettet Co., incorporated. (See page xiv this issue.)

Predigested beef is the foundation of Nutrient Wine of Beef Peptone, a palatable and serviceable liquid food. To protein and carbohydrates are added the stimulating properties of meat extractives. The physician will be pleased with Nutrient Wine of Beef Peptone in cases where the patient's stomach will not appropriate ordinary diet and where the digestive organs demand rest or assistance.

Our readers will note in this issue for the first time the artistic advertisement of Palpebrine. The safe and reliable remedial agent in all external inflammation of the eyes. This product is manufactured by the Dios Chemical Co., who have, during the last quarter of a century, manufactured exclusively for physicians, Dioviburnia, Neurosine and Germiletum, the reliability of which is generally recognized.

No new and untried drugs enter into the composition of these specialties and their formulae have always been communicated to the profession. Palpebrine will fill a long felt want of the general practitioners, who can themselves treat with this product, safely and successfully, external inflammation of the eyes.

The Dios Chemical Co., of St. Louis, will mail free, trial bottle of Palpebrine on application.

Charlotte Medical Journal

Published Monthly.

EDWARD C. REGISTER, M. D., EDITOR

CHARLOTTE, N. C.

THE PRESENT STATUS OF SALVARSAN.

A year and more has passed since the announcement of Ehrlich of his "606" and enough clinical evidence is present to warrant some statement as to the present status of "606," or salvarsan as it is now called.

Anyone who has followed the history of this product will agree that on scientific production has so aroused the medical fraternity, not even excepting Behring's Diphtheria Antitoxin or Koch's Tuberculin; yet after all has been said, after a trial of a little over a year the profession is anything but unanimous as to its virtues or vices.

When "606" was first brought to the attention of the medical men one of the first to try it extensively was Prof. John A. Fordyce at his service at the City Hospital, at Bellevue Dispensary and at the University and Bellevue Hospital Medical College Dispensary.

His results were published in the New York Medical Journal, and in two exhaustive articles he reported several hundred cases. His results were simply no less than wonderful. Cases seemed to clear up in an incredibly short time and since every case had a Wassermann performed before and after, a negative Wassermann taken a week after injection was considered absolutely diagnostic. Reports of the German clinics confirmed, or rather corroborated, the results obtained here and already syphilis was classed as one of the conquerable diseases.

More extensive trials and careful following up of the cases injected began to show a certain percentage of relapses, so that Ehrlich's "one dose enough" method began to be doubted. As the number of relapses began to increase, the profession began to become skeptical of the value of the product at all, and one prominent genito-urinary surgeon in New York remarked "that he would rather have syphilis than "606." The French surgeons who from the beginning stood out as doubting "Thomases" now came out openly against the drug. At about the same time several deaths were reported and in one article in the New York Medical Journal by Dr. Fordyce the former enthusiast gave way to mild caution and some skepticism.

As a result of this, the true character of the drug has been ascertained, and it is this criticism both pro and con that has placed "606" into our hands as one of our most valued drugs. It has established, 1st. That it does cure or at least overcome the most objectionable features of the disease. 2nd. That it must be used with care and none should be administered except after careful physical examination of the patient. 3rd. That we must not promise a complete cure with one injection. 4th. That the only assurances of a complete cure is examination of patient at regular intervals, and if possible the treatment to be as follows: The first injection after Wassermann is positive. Following this a course in hypodermics of mercury salicylate gr. ii every week for four weeks; this to be followed by a second injection of "606" and followed by the mercury injections for two months. Then a third injection of "606." A month after the first injection the blood will be found to be negative and in my experience I had one case that reported regularly for six months, monthly, and no recurrence has taken place and the Wassermann is negative. 5th. Have faith in the drug and success will crown your efforts.

INSANITY AS THE PUBLIC SEES IT.

There recently appeared in the *Chicago American* a notable screed from the pen of Ella Wheeler Wilcox, telling her belief in the cure of insanity by mental suggestion. To this a reply was made, apparently in the trenchant, telling style we have learned to attribute to Brisbane, which completely demolished the card house. There is so much of vital interest to us and to humanity in this matter that we will discuss it further.

There never has been or will be a time when public opinion does not veer between widely separated extremes. *Medio intissimus ibis* is a maxim sagely rendered thousands of years ago, and it is true other thousands of years previously. The influence of mind over matter and that of matter over mind has been discussed since man learned to separate the two. The Gnostics sought to relieve Deity from responsibility for the existence of evil, by assuming the eternal pre-existence of matter, which was essentially evil. From the eternal Divine came an emanation; from this another, as the light of the sun falling on a mirror may be reflected against a wall, and from this against another wall. In this manner the seventh successive emanation from enamation fell upon the surface of the abyss, and the image thus formed, pertaining to crude matter with some divine light added, became the creator of the universe, the latter consequently consisting of mingled good and evil. It remained for modern minds to recognize the truth that evil is as essential to the existence of good as the negative pole is to the positive.

The votary of Ildabaoth differed from Mrs. Wilcox in that the former recognized the fact of the two elements, she considering only the one. Mind truly reacts upon matter, but so does matter react upon mind. Surely the average human intellect possesses the capacity to retain both these impressions at the same time.

George M. Gould enlightened the medical world by his recognition of eye strain as a cause of many abnormal mental conditions, eccentricities, peculiarities, states of feeling and beliefs. Brisbane alludes to the impossibility of removing adenoids by mental suggestion, and merely leaves to inference their bad effects. We know that many children are backward, at the foot of their classes, their studies in school and their progress in after life hindered by the interference with cerebral circulation and cerebral function caused by these bodies. The debility and laziness of a large part of the population of a large section of our country have been lately attributed to the presence of the hookworm in their bowels. Just how the parasite is to be dislodged by "thought" remains to be demonstrated.

Innumerable tales depict the effects of constipation and fecal toxemia on the individual's mental processes. The world's famous grouches, like Samuel Johnson and Thomas Carlyle, were poisoned by fecal absorption and their gloomy pessimism might have been dissipated by a good cholagog pill. Voltaire agreed to commit suicide to get away from this wretched world. A young woman suffered from the terrifying conviction that she had committed the "unpardonable sin" but all sense of guilt vanished when a ten-day accumulation was removed by purge and clyster.

Investigations made in Boston at a psychologic clinic showed that fecal retention and toxemia were responsible for the causation of mental disorders to an extent previously unsuspected. This observation was confirmed by many medical officers of insane asylums who were consulted upon the matter.

A test of this idea is easily made. Let any person interested take a warm saline or soda enema every evening for a week; at first the water will come away clear, then it will show black matter, then brown, finally only fresh yellowish deposits will appear. Meanwhile take a little calomel at night and a dose of saline laxative in the morning. At the end of a week, realize the lightness, alertness, hopefulness, and increased capacity for work and enjoyment you manifest. This will show how much truth there is in Metchnikoff's assertion, that the colon is a useless relic of pre-existence, and the source of old age and death.

Don't talk—just try it yourself and see.

Were we to stop here we might leave the grossly incorrect impression that we considered fecal toxemia the only cause of insanity. There are many etiologic influences that participate in the work of overthrowing mental equilibrium. One that is forcing itself upon the attention of alienists of late is that of the overwork compelled by modern requirements, of the growing boy and youth. The advance in the medical curriculum, including the preliminary education demanded, is enormous; and has not been attended by any appreciable increase in the mental capacities of the student to enable him to do justice to the advanced demands upon him. That some should take refuge from the dreaded examinations in suicide, that many should seek in alcohol and drugs a disastrous temporary aid, are inevitable consequences.

The burdens of business are no less crushing. Men work up to the physiologic limit of their capacity, then stimulate their exhausted brains with coffee, alcohol or drugs; when the cerebrum resents the outrage in irritability they sedate it by tobacco. Night comes and sleep is refused. The hypnotics are taken in gradually increasing potencies. Sooner or later the associates begin to recognize the curious alternation of moods, veering between undue pessimism and unwarranted optimism, and gradually the features of circular insanity become recognizable.

The man drops out, into the grave or the asylum. The business moves on, or goes to smash. *N'importe.* The tide of humanity closes over the spot where the human pebble fell in, the ripple quiets. The sun rises and sets, winter succeeds summer, the man's children marry, work, succeed or fail according to their capacities, and his own work makes an indistinguishable item in the movement forward or backward, of the tide of humanity.

There was in New York a great merchant named Stewart; his name and his doings known far and wide, over the land. He died. His factories ceased to be profitable, his enterprises were wound up, his great mart sees another name over its doors. The Stewart name is extinct as a business factor; and yet people find places to buy goods, and to sell them, and not a human being has starved as a result of his cessation. Ardent youth stands ever ready to take the sword from the hand of failing age.

PELLAGRA.

Dr. J. Clarence Johnson, of Atlanta, Ga., in the *Southern Medical Journal* for July, 1911, considers the question of whether pellagra is a disease primarily of the alimentary tract. His analysis of twenty cases shows that in nearly all the disease began with symptoms referable to the stomach and bowels. In only three were sore hands first noticed, and in each of these there was a previous history of indigestion in some form. Out of twenty cases the first recognizable symptom in fourteen was directly referred to the alimentary tract. In fourteen cases hydrochloric acid was absent. These cases were observed in Atlanta, where there are no sand flies. There was no distinct history of corn being employed, either spoiled or otherwise. One significant feature noted was that in some who had used corn bread freely there was a distinct craving for it when withdrawn, the symptoms being aggravated by its resumption.

Dr. Johnson says: "The disease is distinctly one of perverted metabolism, having its first expression in the epithelial structures." His paper did not deal directly with the treatment; however, he did state that benefit followed the use of a prescription containing potassium chlorate, tincture of the chloride of iron and essence of pepsin, also a half grain tablet of calcium sulphide. One of these tablets were given three times daily, in severe cases a little oftener. Cramps and abdominal pains were controlled even in severe cases by olive oil in small doses.

Altogether the analysis of this carefully prepared paper goes to favor an affirmative reply to the questions presented in the title. The observation on the absence of hydrochloric acid seems important, as undoubtedly the growth of the fungi is favored thereby.

Several observers have reported favorably upon the use of calcium sulphide even when given in moderate doses. The sulphocarbolate of copper presents an interesting alternative. To children this latter remedy may be given in doses of a milligram seven times a day, and Dr. Waugh states that it may be administered in five times this dose. However, it is a safe remedy to be increased as the occasion demands.

FRACTURED PATELLA.

Yesterday, we were invited by a rising surgeon, one who, according to the actuary tables, should have more of his career before him than behind, to witness the wiring of a fractured patella.

"But why wire?" we asked.

"Because this method heretofore has uniformly yielded good results in my hands," he replied.

"But how about the after effects to the patient?"

Now it is generally conceded that direct fixation of the fragments of a patella, the parts of which have been separated by undue muscular action, is eminently proper, and we are in hearty accord with this view; but why wire these together when the object can be accomplished in a safer and simpler manner? As to fractures resulting from direct violence or traumatism—blows, gun-shot wounds and the like—suture fixation is seldom necessary, as approximation and the plaster cast usually accomplishes all that can be accomplished by any method, so these may be omitted from the discussion.

The older view that close approximation of the two pieces of the bone was prevented by the interposition of the muscles and the redundant parts of the capsule of the knee joint has been found to be incorrect in the majority of cases. Generally the cause of the separation is clot and the interposition of the torn ends of the patellar ligament, as the tear of the latter rarely coincides with the line of fracture of the bone, and it is the ligament structure that should be used to effect repair.

Operation should be done as soon as practicable after the injury, although immediate interference is not necessary. In fact, one may safely wait until the first effects of shock are past, but nothing is gained by postponing the operation beyond twenty-four hours. Then, the parts having been properly cleaned and shaved, a horseshoe incision is made extending from the middle of the condyles of the femur downward so as to include tubercle of the tibia. This flap is dissected upwards and turned back, exposing the upper fragment. The clot having been cleared away and the bleeding stopped the fragments are juxtaposed and then fixed by sewing together with cat-gut the two portions of the ligamentum patellae. Usually this can be done with ease and is all that is necessary to insure union.

Occasionally, extra sutures through the tendon above and below the point of divulsion are necessary, but, as said, these cases are few.

The wound is now closed and, generally, immediately encased in a cast. In some cases, it may be advantageous to swing the limb in a suspended wire cradle for a time, but the direct encasement seems preferable. This method yields immediate results certainly as good as any other method. It avoids drilling and the traumatism necessary to this proceedure, and minimizes the handling of the parts—by no means the least desideratum in doubtful cases. The sutures are absorbed and cannot, therefore, at some future time act as a nidus for infection in case of injury, nor can they themselves cause irritation, as is the case, not infrequently, when wire is used. It must be remembered that silver wire is absolutely and permanently a foreign body, and foreign bodies receive scanty toleration in the human organism. The horse-shoe incision removes the cicatrix from the line of flexion and is best adapted for protection.

The direct use of the cast enables the surgeon to get his patient about on crutches almost immediately and thereby hastens his recovery. Muscular tests of unions obtained by the above method show that such union is as strong as can be secured by any other method. K.

EDITORIAL NEWS ITEMS.

Preliminary Programme Fourteenth Annual Session Tri-State Medical Society of the Carolinas and Virginia, Columbia, S. C., February 21-22, 1012.

OFFICERS SESSION 1912.

Dr. J. Howell Way, Waynesville, N. C., President.

Dr. Wm. E. Anderson, Farmville, Va., Vice-President.

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Dr. A. Murat Willis, Gynæcology, Richmond, Va.

Dr, Lucien Lofton, Obstetrics, Emporia, Va.

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Dr. H. A. Royster, Surgery, Raleigh, N. C.

Dr. H. M. Biggs, Gynæcology, Rutherfordton, N. C.

Dr. Houston B. Hiatt, Obstetrics, Asheboro, N. C.

Dr. A. M. Whisnant, Eye, Ear, Nose and Throat. Charlotte, N. C.

SOUTH CAROLINA:

Dr. Wm. J. Burdell, Medicine, Camden, S. C.

Dr. Hugh R. Black, Surgery, Spartanburg, S. C.

Dr. Arch E. Baker, Gynæcology, Charleston, S. C.

Dr. Wm. Lee Kirkpatrick, Obstetrics, Pacolet, S. C.

Dr. E. R. Wilson, Eye, Ear, Nose aud Throat, Sumter, S. C.

PROGRAM.

Wednesday, February 21, 1912, 10 a. m.

Place of meeting Assembly Hall, Manson Building, Corner of Main and Taylor streets.

Called to order by Dr. James H. McIntosh, Columbia, S. C., Chairman Committee of Arrangements.

Divine Invocation, Rev. Dr. C. E. Burts, Columbia, S. C.

Address of Welcome by City, Hon. Wade Hampton Gibbes, Mayor of Columbia.

Welcoming Address on Part of the Profession, Dr. H. W. Rice, President Columbia Medical Society.

Response, Dr. Robt. C. Bryan, Richmond, Va.

Fourteenth annual session of the Tri-State Medical Association declared formally opened by Dr. McIntosh and Dr. J. Howell Way. The President is presented.

PAPERS AND ADDRESSES.

Address of the President, Dr. J. Howell Way, Waynesville, N. C.

"Result of Different Methods in the Treatment of Syphilis of the Nervous System in the last Fifty Cases"—Dr. J. Allison Hodges, Richmond, Va.

"The Recognition and Treatment of Thyroid Disease"—Dr. Jno. Rogers, New York, N. Y.

"Home Treatment versus Climatic in the Treatment of Tuberculosis"—Dr. Carl V. Reynolds, Asheville, N. C.

"Tuberculosis and How to Combat It"—Dr. Charles A. Julian, Thomasville, N. C.

"Diseases and Degenerations Due Directly to Alcohol"—Dr. T. D. Crothers, Hartford, Conn.

"Diphtheria Carriers"—Dr. Henry Page, Fort Moultrie, Moultrieville, S. C.

"The Contagium and Contagiousness of Scarlet Fever"—Dr. L. B. McBrayer, Asheville; N. C.

"The Clinical Value of the Polygraph, Personal Observations"—Dr. Philip Roy, Washington, D. C.

"Clinical Significance of Tachycardia or Swift Heart"—Dr. Alexander G. Brown, Richmond, Va.

"Some Observations on Arthritis Deformans"—Dr. William P. Matthews, Richmond, Va.

"Hypertrophied Thymus and the Status Lymphaticus with Report of Cases"—Dr. J. H. Taylor, Columbia, S. C.

"On Psychic Disorders Consecutive to Injury—Pathogenesis and Treatment"—Dr. Tom A. Williams, Washington, D. C.

Subject Unannounced—Dr. J. W. Jervey, Greenville, S. C.

"Nausea of Pregnancy"—Dr. John N. Upshur, Richmond, Va.

"Medical Aspects of Cancer in Female"—Dr. H. B. Weaver, Asheville, N. C.

"Some Practical Conclusions as to the Cause of the Increased Death Rate Above the Age of Forty"—Dr. J. C. Walton, Richmond, Va.

"The Bismuth Meal of Handek as an Aid in Diagnosis of Gastric Ulcer"—Dr. W. O. Nisbet, Charlotte, N. C.

"Physical Signs of Pulmonary Tuberculosis Caused by Nasal Hypertrophy"—Dr. Mary E. Lapham, Highlands, N. C.

"The Pseudo-Malarial Types of Acute and Chronic Pyelitis"—Dr. Douglas Vanderhoof, Richmond, Va.

"The General Application of Diet Based Upon the Advanced Physiology"—Dr. A. W. Calloway, Asheville, N. C.

"The Diagnosis of Early Tuberculosis by X-Ray"—Dr. A. L. Gray, Richmond, Va.

"Treatment of Typhoid"—Dr. J. S. Brown, Hendersonville, N. C.

Subject Unannounced—Dr. Thomas E. Anderson, Statesville, N. C.

Subject Unannounced—Dr. Clyde E. Cotten, Black Mountain, N. C.

Subject Unannounced—Dr. Davis Furman, Greenville, S. C.

"Rupture of the Uterus During Labor"—Dr. Charles R. Robins, Richmond, Va.

"The Treatment of Tubal Infections"—Dr. John E. Canaday, Charleston, West Va.

"The Surgical Treatment of Gastro-Intestinal Poisoning"—Dr. A. B. Knowlton, Columbia, S. C.

"One of the Fifty-Seven Varieties of Operation for Retro-Displacements"—Dr. A. Murat Willis, Richmond, Va.

"The Retinitis Albuminurica of Pregnancy"—Dr. E. Reid Russell, Asheville, N. C.

"The Watkins Operation and Modification in Procidentia and Retro-Positions of Uterus"—Dr. Charles M. Strong, Charlotte, N. C.

"The Cystoscope as an Aid in Gynecological Diagnosis"—Dr. C. A. Woodard, Durham, N. C.

Subject Unannounced—Dr. A. E. Baker, Charleston, S. C.

"Sociologic Aspect of Drunkenness, Duty of State"—Dr. Stephen Harnsberger, Catlett, Va.

"The Indications for Operation in Myoma of Uterus"—Dr. J. Ernest Stokes, Salisbury, N. C.

Subject Unannounced—Dr. F. H. McLeod, Florence, S. C.

"The Uterus as a Retention Cyst"—Dr. Morris M. Caldwell, Wilmington, N. C.

"Etiology and Treatment of Dysmenorrhoea"—Dr. J. T. Burrus, High Point, N. C.

"Safeguarding and Lessening the Disagreeable Features of Surgical Operations"—Dr. Southgate Leigh, Norfolk, Va.

"Our Duty to Our Patients From a Surgical Standpoint"—Dr. A. Barnes Hooe, Washington, D. C.

"The Negro as a Surgical Subject"—Dr. Lucien Loften, Emporia, Va.

"Early Diagnosis of Carcinoma"—Dr. F. T. Meriwether, Asheville, N. C.

"Some Questions in the Surgical Treatment of Bile Tract Infection"—Dr. Stuart McGuire, Richmond, Va.

"Certain Problems and Procedures as to Surgery of the Central Nervous System"—Dr. Charles H. Frazier, Philadelphia. Penn.

"The Significance of Rectal Bleeding"—Dr. E. H. Terrell, Richmond, Va.

"Observations on Surgery of the Kidney"—Dr. H. A. Royster, Raleigh, N. C.

"Intussusception of the Ileum in Infants and Children"—Dr. J. Shelton Horsley, Richmond, Va.

"The Value of the Cystoscope in Surgical Diseases of the Kidneys"—Dr. F. Webb Griffith, Asheville, N. C.

"The Diagnosis of Surgical Conditions of the Ureter by Means of the X-Ray"—Dr. Daniel D. Talley, Jr., Richmond, Va.

"The Management of Tuberculous Hip Disease"—Dr. William Moncure, Raleigh, N. C.

"Sacro-Iliac Relaxation and Dislocation"—Dr. Michael Hoke, Atlanta, Ga.

"Some Practical Points in the Management of Appendicitis"—Dr. Robert L. Gibbon, Charlotte, N. C.

"Pyelitis"—Dr. Robert C. Bryan, Richmond, Va.

"Modern Methods of Diagnosis in Urinary Surgery"—Dr. Henry G. Bugbee, New York City.

"Report of Twenty-Three Consecutive Prostatectomies"—Dr. Lawrence T. Price, Richmond, Va.

"Gall Stones Complicating Pregnancy and the Puerperium; Report of Six Cases"—Dr. Joseph Graham, Durham, N. C.

"Pschyic Hardening"—Dr. R. S. Carroll, Asheville, N. C.

"Elimination and Its Importance in the Treatment of Pulmonary Tuberculosis"—Dr. I. J. Archer, Black Mountain, N. C.

"Some Clinical and Experimental Observations Concerning Protoclysis"—Dr. Hugh H. Trout.

"Surgical Treatment of Pancreatitis, Both Immediate and Remote"—Dr. J. F. Highsmith, Fayetteville, N. C.

"Remarks on 690 Labor Cases with One Maternal Death"—Dr. Virginius Harrison, Richmond, Va.

"Rupture of Uterus During Pregnancy"—(Author's Name not Given).

."How May We Reduce the Morbidity and Mortality Incident to Pregnancy and Childhood"—Dr. B. B. Steedly, Spartanburg, S. C., and Dr. J. G. Pitman, Gaffney, S. C.

"The Conservative Obstetrician"—Dr. A. B. Croom, Maxton, N. C.

"Obstetrics from a Rural Standpoint"—Dr. G. T. Sikes, Grissom, N. C.

"Puerperal Eclampsia; Suggestions on Treatment"—Dr. D. A. Stanton, High Point, N. C.

"The Effect of Repeated Pregnancies Upon a Woman as a Life Insurance Risk"—Dr. Albert Anderson, Raleigh, N. C.

"Result of Neglected Lacerations of the Uterus and Vagina"—Dr. Jno. A. Williams, Greensboro, N. C.

"Some Effects of Negligence in Country Practice"—Dr. T. I. Fox, Franklinville, N. C.

"A Plea for Early or Primary Repair of the Perineum"—Dr. W. O. Spencer, Winston-Salem, N. C.

"Prevention of Puerperal Infection in Private Practice"—Dr. W. W. McKenzie, Salisbury, N. C.

"Some Pschyic and Physiological Aspects of Pregnancy and Labor"—Dr. W. J. McAnnally, High Point, N. C.

"Toxæmia of Pregnancy"—Dr. H. B. Hiatt, Asheboro, N. C.

"Why We do not Relieve Deafness Where There is no Apparent Cause"—Dr. E. M. Whaley, Columbia, S. C.

"Tuberculosis of the Tongue"—Dr. Silvio von Ruck, Asheville, N. C.

"Orbital Complications and Diseases of the Nasal Accessory Sinuses"—Dr. A. M. Whisnant, Charlotte, N. C.

"Chronic Nasal Diphtheria"—Dr. Clifton M. Miller, Richmond, Va. (Presented as a Candidate's Thesis to American Laryngological, Rhinological, and Otological Society and Read by Permission of Society).

"Prescribing of Glasses, How and By Whom it Should be Done"—Dr. Chas. W. Kollock, Charleston, S. C.

"Report of a Rare Tumor of Neck and Face"—Dr. E. T. Dickinson, Wilson, N. C.

Subject Unannounced—Dr. Owen Smith, Asheville, N. C.

The arrangement of papers in this program will not be observed in final program which will attempt to group kindred subjects and as near as possible follow the wishes of authors, giving them the day they prefer, where it can be done.

Errors, omissions, or titles of new papers should be reported by authors or chairmen of sections at once to the Secretary for correction or place on final program. Papers should be prepared in duplicate and a copy given Secretary at meeting.

HOTELS OF COLUMBIA.

The Colonia Hotel will be headquarters. Rates $4 to $5.

Jerome Hotel (American) $2.50 to $4.00.

Columbia Hotel (American) $2.50 to $3.50.

The Albert (European) $1.00 to $1.50.

Reservations should be made early as accommodations are somewhat limited on account of repairs to another hotel in city.

SOCIAL FUNCTIONS.

Reception at Dr. A. B. Knowlton's residence, 1329 Hampton street, on Wednesday evening, February 21, 1912, 9 to 12 p. m.

Smoker by the Columbia Medical Society at the Metropolitan Club, Thursday evening, February 22, 1912, 9 to 12 p. m.

ROLFE E. HUGHES,
Sec'y-Treas.

Laurens, S. C., Jan. 20, 1912.

Dr. Harry T. Ingle of Mobile, Ala., has been appointed Chief Surgeon of the Mobile and Ohio Railroad Company, to succeed Dr. Rhett Goode, deceased.

The Barbour County (Ala.) Medical Board met in Eufaula, Ala., on January 3rd at the office of Dr. W. P. Copeland for regular routine business and the annual election of officers. The following officers were re-elected: Dr. J. S. Tillman, Clio, president; Dr. B. F. Jackson, Clayton, vice-president; Dr. W. P. Copeland, Eufaula, censor; Dr. L. F. Tysinger was re-elected city physician of Eufaula, and Dr. J. W. Fenn was elected health officer of Eufaula, a new office created by the board at this meeting. After the meeting Dr. W. T. Britt entertained the doctors and a few friends at an elaborate oyster dinner at the Bluff City Inn.

Dr. J. L. Picot, of Raleigh, N. C., has been elected superintendent of the Central State Hospital at Raleigh to succeed the late Dr. James McKee.

There is no doubt that Dr. Picot will fill this office very acceptably. He has for several years been second assistant physician in this institution.

Dr. Picot was at one time president of the North Carolina Medical Society, and also president of the State Medical Examining Board, and has always been regarded as one of the most skillful and learned men of the State.

Marriages.

Dr. J. E. S. Davidson, a prominent physician of Charlotte, N. C., and Miss Lucretia Nash Reid, of Norfolk, Va., were married at the home of the bride's sister, on January the 3rd.

Deaths.

Dr. Norton Boyce Hotchkiss died in New Haven, Conn., on January the 29th.

Dr. Hotchkiss was born and reared in Fort Mill, S. C. He was educated in Fort Mill and in Charleston, S. C., afterward studying medicine at the University of Maryland, from which institution he graduated with high honors before he was 21 years old.

Soon after his graduation Dr. Hotchkiss located in New Haven, where by his skill, knowledge and professional judgment he soon became prominent as a successful surgeon. He was captain of the surgeon's corps of the Governor's Foot Guards for ten years and was for two years surgeon general on Governor Woodruff's staff. Both socially and professionally he was prominent in the life of New Haven. He was financially interested in two hospitals in that city.

Dr. James McKee, who for twelve years has been the Superintendent of the State Central Hospital at Raleigh, N. C., died on January the 2nd.

Dr. Mckee was born in Raleigh, January the 5th 1844. When he was twenty-one years of age, he entered the office of his father, the late Dr. W. H. McKee, under whose direction he began the study of medicine. In October 1867 he entered Bellevue Hospital College in New York City, and was graduated from that institution in 1869. He then returned to Raleigh and began the practice of the profession that he had chosen.

Dr. McKee has won wide distinction in the medical world. He was a member of the North Carolina State Medical Society of which organization he was secretary for six-years. He joined this organization 1888, and was a most active member.

Dr. McKee was the first physician in North Carolina to instruct the negro in medical science.

In the death of Dr. McKee, North Carolina has lost a most excellent man, and the medical profession of the South has lost one of its most eminent physicians.

BOOK NOTICES.

Infections of the Hand. A Guide to the Surgical Treatment of Acute and Chronic Suppurative Processes in the Fingers, Hand and Forearm. By Allen B. Kanavel, M.D., Assistant Professor of Surgery, Northwestern University Medical School, Chicago. Octavo, 447 pages, with 133 illustrations. Cloth, $3.75 net. Lea & Febiger, Philadelphia and New York, 1912.

It is strange that the surgery of infections of the hand has never before been properly explained, for this member is the most exposed portion of the human body, is the universal tool in all industries, and is indispensable for the great mass of mankind in making a living and in almost every action of daily life. Anatomically the hand is tremendously compact, particularly in its various muscles, tendons and fasciæ, and its direct connection with the lymphatics of the arm makes its infection highly dangerous. Dr. Kanavel has made a special study of all these problems, and has been able to reduce the hitherto unsatisfactory surgery of the hand to comparatively simple principles and directions He has illustrated his work with many original drawings. Such a work will be needed not only by every surgeon, but also by all general practitioners, for injuries of the hand are met with everywhere, and require prompt and proper care. It is rare that any medical book can be said to render a high public service, but this is obviously true of the present work.

Handbook of the Trees of the Northern States and Canada East of the Rocky Mountains. Photo-Descriptive. By Romeyn Beck Hough, B. A., Author of

"American Woods." Lowville, N. Y.: Published by the author. 1907.

The author of this volume has exerted an immense amount of energy in the preparation of this book, not only from a theoretical standpoint, but also from a practical standpoint.

The following abstract from the St. Louis Lumberman concerning this volume will express our sentiments:

"It is doubtful if any book placed before the public in recent years possesses the peculiar charm of this Handbook of the Trees. A veritable encyclopedia of hard won knowledge, and the manner of presentation is as beautiful and fascinating as it is scientifically accurate and generally instructive. No observer of the trees that we can recall has performed such a valuable service as Mr. Hough in this book. Never was a camera used to better purpose than in the preparation of this work. Full information is given in the text, which also contains an analytical key, glosesary and index, which are the best of their kind we have ever seen. A unique feature, which should commend the work to lumbermen, timber holders, cruisers and those identified with the lumber and timber interests, is the series of magnified wood structures, designed as an aid in identifying timbers."

The cut above will give some idea of the charming way that this volume is illustrated.

The Education of Women. By Marion Talbot, Dean of Women and Professor in the University of Chicago. The University of Chicago Press, Chicago, Ill.

The author has prepared, and presented this book to the public with the belief that current discussion of educational aims and methods does not adequately take into account the needs of girls and women. There is undoubtedly some truth in both of the opposing views, on the one hand, that education of women should be determined principally by their function in perpetuating the life of the race, and, on the other hand, that as the laws of mind are identical for the two sexes the education of women should be the same as that of men.

This work is divided into three parts as follows: Part I, Women's Activities, Past and Present; Part II, The Educational Machinery; Part III, The Collegiate Education of Women.

This book is very valuable and should be widely read.

The volume is neatly bound and shows that care has been exercised on the part of the publishers to make it attractive.

The Practical Medicine Series, Comprising Ten Volumes on the Year's Progress in Medicine and Surgery. Under the General Editorial Charge of Gustavus P. Head, M.D., and Charles L. Mix, A.M., M.D. Volume X. Nervous and Mental Diseases. Edited by Hugh T. Patrick, M.D., Professor of Neurology in the Chicago ·Policlinic, Clinical Professor of Nervous Diseases in the Northwestern University Medical School; Ex-President Chicago Neurological Society. Peter Bassoe, M.D., Assistant Professor of Nervous and Mental Diseases, Rush Medical College. Series 1911. Chicago: The Year Book Publishers, 180 N. Dearborn St.

This volume, like former editions of this series, is a simple, yet complete treatise on nervous and mental diseases. These volumes are all of value to the medical profession, and every physician should make an effort to get in possession of this entire series, which costs only $10.00.

Transactions of the Thirty-Third Annual Meeting of the American Laryngological Association held at Philadelphia, Pa., May 29th, 30th and 31st, 1911. New York: Published by the Association. 1911.

This volume of transactions contains thirty-one articles which were read before this society. These articles are all valuable, but there is one that we think merits special attention. It was written by Dr.

Thomas Hubbard, entitled, "Reports of Cases of Foreign Bodies in the Oesophagus and Bronchi Operated by the Killian Method.

This volume contains 315 pages, is well bound, and presents an attractive appearance.

Case Histories in Medicine. Illustrating the Diagnosis, Prognosis and Treatment of Disease. By Richard C. Cabot, M.D., Assistant Professor of Clinical Medicine, Harvard Medical School. Second Edition, Revised and Enlarged. Boston: W. M. Leonard, Publisher. 1911.

The present volume of this work has been written with the practitioner primarily in mind.

Medical teachers are often charged with nihilism in therapeutics. To refute this accusation, the author of this work has added in this edition a list of the drugs which actually are used by the internists attoched to the Massachusetts General Hospital.

Dr. Cabot has not so limited himself to space as he did in his former volume, and he has gone more into details concerning *prognosis* and *treatment*.

The book is substantially and attractively bound, and contains 295 pages of reading matter. We take pleasure in recommending this work to all physicians.

How Henriette Renan Died.

Meanwhile, Renan continued to work on his book. But he found afterward that what he wrote during these intervals was incoherent and recondite. The fever progressed. Henriette was languishing in a room opposite his own. One day about sunset she was able to come to her brother. She leaned on the couch and fumbled in his papers. She tried to, but could not, work. She looked out of the ogive-window, which opens on Jabal Mousa in the distance, where legend places the death of Adonis, and turned to Ernest weeping. She was conscious of her approaching end. She spoke of her mother, of little Ary, Renan's son, and of making her will.

"I have loved you very much," she said. "Sometimes my affections have caused you pain, I have been unjust, exclusive, exacting; but that is because I loved you as one seldom loves, perhaps as one should not be loved " She goes back to her room, and brother and sister never see each other again. The thought that he could not be beside her in her agony tormented him throughout his life.

On the following day, the commander of the Caton sent his sailors with a litter to remove Henriette to Beirut. The doctors also arrived. A hovering of anxious wings, a heavy whispering of sorrow shadowed the atmosphere of Amsheet. Zakhia and his family and friends sat in the grand hall weeping. The village was a sort of capital where these two sovereigns of the affections of its people lie dying.

A consultation was held. The cure, who is also a medicine man, made his way through the crowd to suggest to the doctors bloodletting. But the cure was too late. And heavy doses of sulphate of quinine could no longer be of help to Henriette. The fever had done its work.

"How is she?" the brother in his delirium inquired.

"She is very ill," replied Antoune, their servant. "How is she?" he asked again, half asleep.

"She is dead."

And this was in the morning of Tuesday, September 24, 1862.—From The Renans in Syria. The Story of the Writing of "The Life of Jesus." By Ameen Rihani in the February Bookman.

The American Review of Reviews.

CONTENTS FOR FEBRUARY, 1912.

Record of Current Events. With portrait and other illustrations.
Cartoons of the Month.
An American Apostle of Peace In Japan. By William T. Ellis. With portrait of Gilbert Bowles.
Rear-Admiral Robley D. Evans. Portrait.
Princeton's New President. Portrait.
Yuan Shih kai and Closing Days of the Manchu. By Adachi Kinnosuke. With portrait and cartoon.
Oscar Hammerstein. By Arthur Farwell. With portrait and other illustrations.
Mr. Pulitzer's Ideals for the Columbia School of Journalism. By G. W. Hosmer, M. D. With portraits of members of the advisory board.
The College and the Man. By J. Irving Manatt. With portrait of Prof. Leonard F. Parker.
Two Moulders of Modern British Policy: Lloyd-George and Sir Edward Grey. By W. T Stead. With illustrations.
A Great Living Tree Museum. By Charles M. Dow. With illustrations.
The National Archives: Are They In Peril? By Rosa Pendleton Chiles.
The Background of the Opium Conference at The Hague. By Elbert Francis Baldwin.
Leading Articles of the Month. With portraits, cartoons, and other illustrations.
The Plan for Better Currency. With illustration.

Maurice Maeterlinck. By Edwin Björkman. With portrait of Maeterlinck and his wife.
The New Books. With portrait.

Diseases of the Digestive Tract.

In harmony with the policy of publishing "Symposium Numbers," at intervals, on timely subjects, the editors of the Interstate Medical Journal have outlined a number on "Diseases of the Digestive Tract" for March, 1912.

The "Symposium Numbers" of the Interstate (e. g. "Special Syphilis Number," January, 1911, and "Special Heart Number," June, 1911) are notable contributions to medical literature which command the attention of progressive physicians wherever the English language is read.

ORIGINAL ARTICLES.

Points in the Diagnosis and Non-Surgical Treatment of Duodenal Ulcer; George Herschell, M. D., London.

Proctoscopy and Sigmoidoscopy; Prof. H. Strauss, Berlin.

The X-Ray in the Diagnosis of Gastro-Intestinal Diseases; Ludwig Kast, M. D., New York.

Diagnostic Value of the Test for Occult Blood in the Stomach Contents and Feces H. W. Soper, M. D., St. Louis.

The Diagnosis of Cancer of the Stomach; J. W. Weinstein, M. D., New York.

Splanchnoptosis: Enteroptosis; John C. Hemmeter, M. D , Baltimore.

Some General Remarks on the Treatment of Gastric Diseases; Jacob Kaufmann, M.D., New York.

Intestinal Parasites: C. C. Bass, M. D., New Orleans.

Duodenal Alimentation; Wm. Gerry Morgan, M. D., Washington.

Diseases of the Digestive Tract are always of special interest to the physician, since probably more than half of his practice is confined to gastro-intestinal disturbances, and just now of timely interest, because of recent advances in methods of diagnosis and treatment of these diseases.

Abstracts of the Leading articles of the month.

Bullous Ichthyosis.—Pernet (The British Journal of Dermatology) has called attention to this unusual condition. The patient was a female child, aged 4½ months, Marion F. She was, first seen on April 25th, 1902. The disease had been present since birth.

When the child was born some denudation of the skin was noticed, and the next day blisters appeared. The blisters had kept on recurring until the week before the child was seen. Up to three months of age the child had not thrived, had got thin, and only weighed 5 lbs. Since that time her weight had risen to 10 lbs.

When seen the child looked fairly well nourished. She was covered almost all over, except palms and soles, with gray, slightly scaly lamellæ. Further, the scaliness was almost in the form of a crust, which was solid, and could be readily peeled off, the skin beneath being slightly red and smooth, but there were indications that the lamellæ would re-form.

On August 22nd no actual bullæ were observed, and the appearances were much what they were when the child first came under observation. But on the left arm near the axilla there were the remains of a bulla about 1 inch in diameter which had appeared a week previously. The others the mother had noticed were smaller.

October 24th, 1902.—A crop of blisters appeared a week previously. They were scattered about the limbs and abdomen.

The child was next seen when she was two years of age.

There were now large areas of denudation about the trunk, on the site of what had been bullæ the day before. Here and there there were also small purulent foci (cutaneous abscesses). The remainder of the skin was dirty-looking, presenting the appearances of a well-marked ichthyosis.

The mother said in reply to inquiry that she herself did not readily perspire, but her skin was not very dry.

Howbeit, especially as to the connection or otherwise with ichthyosis proper, further observations are needed to allow of our classifying the case described, and which at the time of observation the writer called on the spur of the moment, "anomalous congenital bullous eruption plusichthyosis," with the alternative name of "bullous ichthyosis." He is hopeful that this attempt to elucidate a point of interest will perhaps be of some value to dermatologists.

Opening New Post-Graduate Medical School Building.

On January 11th the new building of the New York Post Graduate Medical School were opened to inspection and use. The plant provides for eleven operating rooms and groups of teaching rooms for each of the Departments, besides extending the capacity of the hospital service to about 400 beds. The curriculum of the school is correspondingly extended and adapted to the trippled facilities.

Renal Tuberculosis.—Barth (Deut. med. Wochensch.) has investigated the end results in 37 of 40 cases of renal tuberculosis treated by nephrectomy. Of these 12 were cured and 12 improved or still under treatment, while 13 died. The period of observation of cases termed cured ranged from one and one-third to nineteen years. A comparison of these results with those obtained in about the same number of cases not subjected to operation shows that the prognosis in the latter was far less favorable. From his studies Barth draws the following conclusions: So long as the disease is confined to one kidney and its ureter nephrectomy affords very favorable prospects of a permanent cure. If the bladder is already affected, a complete and lasting cure of the tuberculous process can be expected only in a fraction of the cases, approximately one-fourth. About the same number succumb in the first year to tuberculosis, while in the others a more prolonged improvement can be anticipated. In five of the author's cases of renal and vesical tuberculosis treated by operation improvement persisted for 1¼, 1½, 1¾, 2, and 9 years, while five others died after 2, 3½, 5, and 9½ years of the renal disease or other tuberculous involvement. Even after a complete cure has resulted in tuberculosis of the bladder, various disorders are apt to persist, such as frequent urination, especially at night, and for this reason every case of recognized renal tuberculosis should be nephrectomized, if possible, before the bladder has become involved.

Some Points in the Cure of Inguinal Hernia.—Lucy (Canadian Medical Journal) has collated from many sources certain points which have been serviceable to him and are likely to be so to others in the operation for the radical cure of hernia. The Dr. commends the curved incision of the skin, beginning nearly one inch external to the middle of Poupart's ligament, curving up on the abdomen, and ending at the pectineal eminence, as the resulting scar-line is out of the way of a truss, should wearing one again become necessary.

This flap, dissected down to the external oblique and turned down, gives good access to the subsequent steps.

The opening of the canal, recognizing the lower end of the sac by its white line, freeing and opening the sac and reducing any contents, are all done as usual.

Kocher's disposal of the sac is commended. It is thus done: Grasp the fundus of the emptied sac with curved forceps, invaginating the sac into itself like the finger of a glove, through the canal into the peritoneal cavity; keep the ends of forceps close against the abdominal wall, and project their points out through a small incision one inch external to the angle of the wound, retracting the skin to avoid the necessity of cutting it; draw the sac taut; tie at the neck; cut off and drop the stump back into the wound. Or, if unable to invaginate the sac, pass the forceps, grasping the sac external to the peritoneum, and similarly through the abdominal wall. If desired, the sac may be tied off high up first before grasping it with the forceps, and the stump transfixed by the stitch closing the abdominal incision.

Reiss says Kocher's disposal of the sac is the main point in the cure; that when this is done the inguinal canal may be closed with No. 1 catgut safely.

Goldspohn's method of placing two heavy clamp forceps on Poupart's ligament, letting them fall flat on the thigh, is serviceable. This faces the internal surface of Poupart's ligament up, greatly facilitating sewing the oblique and transversalis fascia to its lower internal surface.

Bassini's closure. In sewing the internal oblique and transversalis fascia to Poupart's ligament, the first stitch includes the edge of the rectus muscle, uniting it to Poupart's ligament. Four to six stitches complete this row of sutures. The cord is carried to the outer angle of the wound.

If thought advisable, one stitch may be placed external to the cord, which lies in its natural position.

Remove the forceps, allowing Poupart's ligament to resume its natural vertical position. Then, beginning at the outer angle, sew the external oblique to the upper edge of Poupart's ligament down to where the cord and vessels emerge at the pubic bone.

In closing the skin-flap, adjust it carefully, insert a few buried catgut sutures to prevent pocketing, and begin the surface sutures in the center of the flap to prevent puckering.

Applying a two-per-cent. cocaine solution carefully to the patient's nostrils a few minutes before giving ether abolishes the sense of smell. The patients go to sleep quicker, not being annoyed by the pungency of the ether.

He has used this plan in 47 cases, with one recurrence, in a child of sixteen months, operated on for strangulated hernia. The ages of the patients varied from five weeks to seventy-four years.

Finer grades of Marcy's kangaroo tendon are preferred for the deep layers.

Judd, reporting from the Mayos' clinic, says: "The strength of closure depends almost entirely on the internal oblique, being the only structure here with good blood and nerve supply." He reports over 1650 cases, with practically only one per cent. of recurrences. If the internal oblique looks weak, he takes in the aponeurosis of the external oblique in the first row of stitches, to strengthen the internal oblique, thus displacing the cord external to this part of the external oblique.

Kocher, on the other hand, says: "Suture of the deep layers, internal oblique, and transversalis to Poupart's ligament is not necessary for the cure of ordinary inguinal hernia." He attributes his success largely to the use of silk sutures, reporting practically 4 per cent. of recurrences. Kocher says Bassini's closure shows 5 per cent. of recurrences.

Treatment of Scoliosis.—Roth (British Medical Journal) says from a study of cases that scoliosis is a disease of females—843 females, 157 males. Scoliosis is a disease of adolescence—86 per cent. between six and twenty years. The frequent occurrence of scoliosis in members of the same family points to hereditary transmission. The bad position assumed in writing, a delicate constitution, and too rapid growth are largely responsible for very many cases. Difference in the length of the legs is not a common cause of scoliosis. Pain is a frequent symptom. Flatfoot is a very frequent complication. Attention to dress before any treatment is absolutely essential. Treatment should never be commenced until a record of the osseous deformity has been made.

Treatment by "posture and exercise" entirely arrests the increase of bony deformity in all but 5.5 per cent. of observed cases, and in 3.3 per cent. slightly decreases it.

In 83 per cent. of cases a permanent practical cure is brought about.

The treatment employed in these cases is as follows: Attention to dress, daily systematic training for from one to three months of the spinal and other muscles, including the development of the thorax. Re-education of the patient's muscular sense as to an erect or improved position; improved position to be maintained at all times, whether sitting or standing. Attention to general health. Subsequent home treatment to prevent relapse from the improvement or cure that has been obtained by the surgeon.

The Treatment and Prevention of Measles and Scarlatina.—Milne (British Medical Journal) says that in the treatment of scarlet fever and measles by the method he is now advocating comdlications are unknown; in the 800 cases of scarlet fever he has himself recorded, where this method was adopted, no single case with a complication in the throat, nose, ears, glands, or kidneys occurred. Yet these cases had only from 750 to 400 cubic feet of air space apiece, and some were in poor and overcrowded homes. Further, infection and the spread of the disease are unknown if his method is adopted; he has repeatedly shown how patients with scarlet fever may be nursed side by side with healthy children, or with the most serious operation cases, and how they may within ten days attend school and church with 1300 other children, without the occurrence of either infection or complication. Such a thing as a return case is unknown.

The Dr. describes his method of treatment. As early as possible in the disease, and without waiting for definite confirmation of the diagnosis in doubtful cases of scarlet fever or measles, the tonsils and the pharynx, as far up and down as possible, are swabbed with 10 per-cent. carbolic oil every two hours for twenty-four hours, or for longer if the swabbing cannot be carried out regularly. Rarely is it necessary to continue the swabbing for longer than this. The swab should be of cotton-wool, firm, the size of the distal phalanx of the patient's thumb, held in a forceps, or fixed to a piece of wood by a thread. A fresh swab should be used on each occasion. The carbolic oil has the great advantage of relieving pain and enabling the patient to swallow more easily. In addition, the patient is gently rubbed all over with pure eucalyptus oil, from the crown of the head to the soles of the feet. This is done as soon as the patient is suspected of scarlet fever or measles, or as soon as he is found to be suffering from either of the diseases. This inunction with oil of eucalyptus is repeated morning and evening for four days, and once a day for the six days following.

The advantages realized by this method of treatment, not only in the experience of the writer but also in that of every practitioner who has carried it out, are as follows:

1. When this treatment is commenced early—and this is vital—secondary infection never occurs, and consequently complications are unknown.

2. With this treatment carefully carried out, children may occupy the same room, and even the same bed, without the risk of infection.

3. The economy of the treatment. An ordinary case in isolation costs ten pounds and upwards; this perhaps two shillings. Therefore it means a saving of millions of pounds annually.

4. Its household economy. The mother is free to attend both the patient and her duties. The father is free to go to work without the slightest risk, and the children

equally free to attend school.

5. No after-disinfection is necessary, for the disease having been destroyed, nothing remains.

6. The author has been frequently asked about the disinfection of the patient's spoons, crockery, etc., as these are such a trouble in an ordinary household. The fact is, there is no disinfection, or in any way a keeping of them apart. They are all collected together, washed in the ordinary way, and served out indiscriminately on the next occasion.

7. In measles, as in scarlet fever, there is no necessity for the hair being cut short, neither for destroying the toys, books, etc., for these may be safely interchanged as soon as the patient is able to play. The net result is that there is no interruption of the domestic, scholastic, or business affairs of the household.

Treatment of Diabetes.—Noorden (British Medical Journal) holds that the older view of the causation of diabetes, the view, that is, that the hyperglycaemia of diabetes results from an overproduction of sugar in the liver rather than from diminished oxidization in the tissues, is the true one, and that it is no longer a theory, but is supported by a considerable body of evidence. Thus in Bernard's puncture glycosuria only occurs if the liver is filled with glycogen and in this form and in glycosuria due to certain forms of poisoning, as, for instance, poisoning by diuretin, the glycogen of the liver is quickly used up, while there is nothing to indicate that the power of oxidization of sugar by the tissues is diminished. The study of glycosuria caused by adrenalin is even more confirmatory, for if large doses be given and no more glycogen is available from the liver, fats and proteins are broken down to form sugar, and it is thus seen that adrenalin is an active promore of the sugar-forming process, while thete is no sign at all that it lessens the action of the tissues upon the sugar in the blood. Again, the respiratory quotient, that is, the ratio of the carbonic acid products to the oxygen used up, is strikingly low in diabetic patients. The conclusion that the low co efficient depends upon lessened oxidation is hasty, for it may be that the action of the tissues upon the sugar in the blood is normal, but that as a result of faulty metabolism in diabetes, fats and proteids have gone to produce the sugar in the blood. The liver has long been recognized to be the regulator of the sugar contents of the blood, but the pancreas and the suprarenals are now also known to be concerned in the process. The author's opinion is that anomalies of the pancreas, usually functional, play a leading part in by far the greater number of cases of diabetes mellitus whether slight or severe, but that the suprarenals seem to play the chief part in acute transitory cases of glycosuria. The conclusion that diabetes depends on over-production of sugar has a bearing upon questions of treatment.

Treatment of Affections of the Mammary Galnds During Lactation.—Schiller (Wien. klin. Wochensch) believes mastitis in nursing women is almost always due to stasis, caused by insufficient evacuation of the glads. The infection of the stagnant secretion is due to bacteria which under normal conditions vegetate in the lacteal ducts without giving rise to any mischief. If infection, as is commonly assumed, resulted from fissures we would more frequently observe cutaneous inflammations, phlegmons or erysipeals of the integument of the breast. Although mastitis occurs quite often in breasts with fissured nipples, this does not, in the author's opinion, contradict his own views as to its origin. As regards treatment, he is especially impressed with the value of Bier's stasis hyperemia, which gives a prompt cure in the early stages and prevents suppuration. If pus has formed, nursing should be continued on the healthy as well as the affected side f the abscess is so situated that the nipple need not be bandaged. Large incisions and drainage are preferable to punctures and hyperemia. As soon as possible after operation the child should be allowed to nurse on the affected side. As a rule, normal lactation is restored within a few weeks. With reference to the treatment of fissures at the nipples, this author recommends a naphthalan ointment, consisting of boric acid 5.0, zinc oxid 10.0, naphthalan and lanolin, of each 25,0. Before every nursing the nipple should be cleansed with oil and cotton, some milk expressed and the child then placed to the breast. After nursing is completed the salve should again be applied. As according to Schiller's plan nursing is allowed at intervals of four hours, one breast being given on each occasion, sufficient time is allowed for cicatrization in the affected breast. Even if the fissures are extremely painful anesthetic ointments are to be avoided, because they delay healing.

Treatment of Infected Wounds. Ruska, (Wiener klin. Wochensch) points out that in the modern treatment of wounds more importance is nowadays assigned to aiding the resistance forces of the organism in the battle against bacteria than to the disinfection of infected wounds. He thinks this purpose is best served by glycerine dressings, which relieve congested by absorbing secretions and thereby promote the circulation of tissue fluids in the affected parts. In this way they also keep the wound clean and soften and loosen crusts and necrotic portions of tissue. All this tends to remove the chief factors which favor the growth of microorganisms, while the absorption of toxins from the wound surface is also diminished. Glycerin itself possesses slight antiseptic power, which can be reinforced by the addition of antiseptics. Moreover, there is no risk in its use, as it can be given in very large doses, 190.0 gm. internally, without any unpleasant by-effects. Apart from the slight burning at the time of application, the dressing is painless, does not adhere to the wound, and therefore can be easily removed. The technic is very simple: A compress moistened with glycerine is directly placed upon the affected part and covered with some impermeable material, and the dressing changed twice daily. Wounds infected with the ordinary pus organisms run a very favorable course, inflammatory phenomena and discharge subsiding in a remarkably short time. The surface rapidly becomes clean and healthy granulations appear. The more acute the symptoms the better the effect of the treatment. Abscess formation in inflammatory infiltrations is frequently avoided. The Dr.'s experience is based upon 100 cases, comprising infected wounds, phlegmons; panaritia, adenitis, and in none of them were any unpleasant by-effects noted even where the glycerin dressings were applied to extensive areas for several months.

Scarlatina and Angina.—Wladimiroff (Arch. f. Klinderheil)gives his experiences with the use of the scarlet fever vaccine of Gabritschewsky, produced by heated to 60° and mixed with a small amount of phenol. It is as yet so uncertain whether the streptococcus is the cause of scarlet fever, or only an accompaniment of the caused organism of the disease, that careful interpretation of results is essential. Angina and erysipelas are true streptococcic infections. As attacks of angina does not make the patient immune to a second attack, while an attack of scarlatina does confer immunity. The author tested this vaccination in a child who had prodromal symptoms, vomiting, rise of temperature, angina, exanthem, and eruption on the body, spreading in one day all over the body, leaving out the chin, lips, and nose, as is the case in scarlet fever. The eruption was seen also on the palate and throat. The symptom complex similar in all respects to scarlatina, but more rapid in development. The strawberry tongue was present on the second day, instead of at the end of a week. It would seem from this observation that the scarlatinal streptococcus plays the principal role in the etiology of scarlatina. The serum of Moser has as its basis the same streptococcus and its curative value has been shown. The angina of scarlet fever often places the physician in a delicate position; if he says that it is true scarlatina he must maintain quarantine for a long time at great inconvenience; if he does not he risks infection to many children in schools and houses. He thinks that his experiments have shown that these anginas are true scarlatina, and should be treated and isolated just like cases of the disease with the eruption, since the vaccine angina is exactly similar to it. It should also be used as a prophylactic measure against the severe symptoms of this disease. This vaccination is quite harmless in well persons, with healthy kidneys, and not in the incubation period of scarlatina. The mediun dose is for two to five years, o.3 c. c,; for five to ten years, 0 5. c. c.; ten to fifteen years, 0. 7. c. c. This vaccine should be widely tested in practice that we may learn its effects as a curative and a prophylactic treatment. It should be handled only by physicians after a careful examination of the physical condition of the patient, the urine having been tested, and the temperature taken.

Malignant Syphilis and "606".—Buschke(Berl. Klin.Woch)agrees with Lesser's definition of this condition, which includes those cases ot syphilis in which the usual scondary period is absent or very short, and which are characterized by the early appearance of ulcerations of the skin and mucous membrane, which differ from the usual tetiary ulcerations in the circular instead of serpiginous form and in being widely distributed over the body. Malignant syphilis is also subject to frequent relapses, and is often accompanied by dffiuse infiltrative gummatous or ulcerative lesions of the internal organs. Buschke does not consider that malignant syphilis has any connection with phagadenic chancre, and states that the chance is usually normal in such cases. As regards the causation of malignant syphilis, he points out that the condition often occurs in robust subjects, and is not necessarily due to predisposing causes, such as alcoholism, tuberculosis, anemia, and general bodily weakness. Neither is malignant syphilis due to the intensity of the virus for both benign and malignant syphilis may arise from the same source of infection, and it has been shown by confrontation that the source of infection of a case of malignant syphilis need be malignant itself. In fact, the subjects of malignant syphilis are predisposed, in some way, but the nature of this predisposition is not known. The writer draws attention to the similarity of malignant syphilis to the form in which syphilis appeared as an epidemic at the end of the fifteenth century, and mentions Finger's suggestion that this severe form affects the individuals of generations who have long been free from syphilis. The Dr. distinguishes four forms of malignant syphilis; (1) Cases which hardly require specific treatment, and recover under stimulating and nourishing general treatment; (2) cases which react to mercurial and iodide treatment, like ordinary syphilis; (3) cases which react to intensive mercurial and iodide treatment, especially to calomel injections; (4) cases which are resistent to mercury and iodides. In these cases he recommends mild arsenical treatment. But such cases are rare, and it is remarkable how so many observers who have reported on Ehrlich's preparation have suddenly come across so many cases which were refractory to mercury. In the very rare cases which do not react to the above treatment, the Dr. would have recourse to "606", provided there were no contraindications. However, he points out out that this preparation has a deleterious neurotropic action, and mentions cases of ocular paralysis and affections of the labyrinth which have been reported by Finger, Stern and himself. In additions to this neurotropic action, he points out that deposits of "606" in the tissues are known to produce necrosis and he thinks it not improbable the microscopic foci of necrosis may be produced in this way in the internal organs after injection of the drug; moreover, that such deposits may predispose to further manifestations of syphilis. In support of this view he mentions the tendency of syphilides to appear in tattoo marks in the skin. The writer also mentions cases of severe headache after intravenous injection of "606." Buschke points out that spirochaetes are absent in the lesions of malignant syphilis, and scarce in those of tertiary syphilis. Hence he considers the action of "606" to be organotropic, like that of mercury and iodide, and not parasitrotropic as Ehrlich supposed. Experimental inoculation of apes from cases of malignant syphilis also produced lesions in which no spirochaetes could be found. He mentions the interesting fact that in no case of tabes or general paralysis has he found the characteristic scars of malignant syphilis. The author concludes that the nature and origin of malignant syphilis will repay futher study, especially as this form resembles, perhaps, the original epidemic form of syphilis rather than the ordinary syphilis of the present day.

Incidence of Placenta Previa in Manila.—Sison (Bull. Manila Med. Soc.,) emphasizes the very high incidence of placenta previa among the poorer classes of Filipino women. The Dr. records twenty-two cases, of whom seven had previous abortions and of the nineteen cases that were examined, fifteen had retroversions, and three had previous subinvolutions. Of the four primiparæ examined all had retroversions. The majority of the single women examined in the gynecological dispensary of the Philippine General Hospital have retroversions. The frequent occurrence of retroversions in young Filipino girls, especially in the lower classes, is probably accounted for by the usual custom of allowing girls of seven to ten years of age to be the nurses for their young brothers and other relatives. These children also often have responsibilities of housework, carrying heavy baskets to the market and attending the younger members of the family. Excluding the case of a woman who was found dead on arrival and three still born babies undergoing putrefaction at the time of birth, the writer's twenty-one cases showed a maternal mortality of 19.04 per cent., and a fetal mortality of 66.66 per cent. The Dr. believes that the high frequency of placenta previa in Manila and its relative frequency in primipara as compared with other statistics is partially accounted for by the large percentage of uterine malpositions and subinvolutions leading to endometritis. The prognosis of central placenta previa when the bleeding is excessive is grave and unless timely interrupted is fatal to both mother and child. The use of a dilating bag in an undilated cervix where the fetus is visible, and the procedure of slow delivery according to Braxton Hick's method in a nonviable fetus insures a better prognosis for the mother by preventing cervical tears. Physiological salt solution introduced by by rectum, under the skin or intravenously favors the recovery of the patient. Babies delivered from mothers dying of acute anemia are born dead. An effort at delivery while the patient is in bad condition hastens the death of the mother.

Malnutrition in Infants.—Merklen (La Ped. Prat.) says that in pronounced cases of malnutrition, besides the decrease in weight and arrest of development, we usually find the patient much agitated, often emitting loud cries almost continually. When exhausted the infant sinks into a troubled sleep. The number of defecations usually decrease and stools may be lacking in uniformity, of a green color and containing quantities of mucus. Frequently stools, even if watery, cannot be expelled without the aid of enemata. Although not so frequently, constipation may be present. There may be regular vomiting after each feeding. The secretion of urine is considerably reduced, all the tissues become flabby and relaxed, every trace of adipose tissue disappears. An infant subject to malnutrition will nurse slowly with frequent interruptions, does not swallow properly. At times, after many vain attempts to draw milk, the child will cry itself into a state of somnolence.

A Local Epidemic of Acute Poliomyelitis.—Currie and Dramwell (Edinburgh Medical Journal) report a local epidemic of five cases of acute poliomyelitis which are of interest from the suggestive data they afford in relation to the incubation period of the disease. These cases all occurred in a farmstead consisting of four houses situated on a private estate some distance from the main thoroughfare and two miles from the nearest town. Children in two of these houses were affected. Three children in one family were taken ill on the 12th, 16th and 18th of September; two children in the other family on the 20th and 24th of September. The children in the second family were not directly exposed to the disease, but their mother was in the house in which the three children were sick on the 16th, 18th and 19th of September. The original source of infection could not be traced. These observations suggest that the incubation period of the disease, in the case of this local epidemic, was probably four days or less.

Collected statistics show that acute poliomyelitis was more prevalent than usual in various parts of England and Scotland during the autumn of 1910.

Roentgen Rays and Arsenobenzol Injections.—Ullmann and Haudek (Wien. klin. Woch.) have investigated by means of Roentgen rays photographs the rates of absorption or subcutaneous and intramuscular injections of certain preparations of mercury, calomel, grey oil and salicylate of mercury and later of arsenobenzol. With respect to the mercurial preparations, they found that (1) the absorption took longer than had previously been supposed (2) subcutaneous injections were, as a rule, absorbed three times as slowly as intramuscular ones; (3) the rate of absorption varied with the different preparations, being much the most rapid for salicylate of mercury and slowest for grey oil. Such being the result, it is clear that for practical purposes the injection method is not available for exact dosage, and that an overdose may occur if an injection be given, while absorption is still taking place from the deposits from old injections. In order to obtain a photograph, oil or paraffin emulsion of Ehrlich's arsenobenzol had to be employed, though later the authors succeeded in obtaining photographs with neutral suspensions and concentrated acid solutions. The dose given was 0.3 gram to 0.4 gram (4.6 to 6 grains). They found that with the acid emulsion the deposit of arsenic persisted in the tissues almost without exception for a time which varied from several weeks to several months, the time being much longer than for the mercurial preparations, the deposits of which in intramuscular injections had usually disappeared in from two to three weeks, and in subcutaneous injections almost always in at least the same number of months, but often much sooner. Moreover, the deposits in the case of the acid emulsion of arsenobenzol were present for at least two or three months and often for much longer, altogether independently of the presence of any severe manifest infiltrations or necroses. Facts such as these have not been sufficiently considered when it is recommended that injection should be repeated in a full dose for a second or third time if the first dose is not altogether effectual, or if relapses occur. Clinical facts point to a similar slow absorption in the case of injections, especially subcutaneous injections, of the neutral suspension, and although the neutral suspension does not give a deposit perceptible so readily by the Roentgen ray method, the authors in one case were able to get a good picture and showed the presence of a deposit three months and ten days after an injectiou. They conclude that single injections of large doses of preparations such as salvarsan are not to be recommended. Only a small part of the injection is rapidly absorbed, and therefore is sufficient for symptomatic effect, while the larger part remains unchanged in the body, or may act injuriously. If intramuscular or subcutaneous injections of the Ehrlich preparation are to be employed, they recommend the administration of several small doses, either at the same time or at intervals, in order to lessen the danger from large deposits, which may sooner or later have an undesirable action.

Venesection in the Treatment of the Pre-eclamptic State and of Eclamptic Seizures.—M. Potocki (Jour. de med. de Paris) says that in the classical treatment of eclampsia, by means of chloroform inhalations, chloral and drastic purgatives, with milk diet, and abstention from all obstetrical interference until dilatation is complete, we have much to deplore. He thinks that the chloroform increases the intoxication of the patient on account of the poisonous action on the liver and kidneys, the emunctories which should carry off the poisons. Jaundice is apt to occur in eclampsia after the use of chloroform, and has even been seen in laparotomies after its use. In all gravidic intoxications with albumin in the urine and eclampsia there is increased arterial tension. To this are due the multiple hemorrhages external or visceral which are observed in the intoxicated, and also the hypertrophy and dilatation of the heart. To lessen the arterial tension is one of the objects of treatment in eclampsia. Often the purple, congested face of the eclamptic indicates the need of venesection. In albuminurics who are suffering from severe headaches, and pains in the back and kidneys, leeches and wet cups applied to the head and back have relieved the symptoms. In several such pre-eclamptic cases venesection has been used by the author with success; headache has been relieved, arterial tension lowered, and the expected eclamptic attacks have not taken place. Some of the products of intoxication have been removed with the blood taken away. Tarnier says that every pre-albuminuric woman may be relieved of her symptoms by a week of milk diet. But we cannot always wait a week for relief, and convulsions may come on before the week of treatment has passed. In the patient who has already begun to have convulsions venesection is not too rapid in its effects. Still generally the crises cease or lessen in frequency, and the patient becomes calm. A second venesection may be done if they return, 600 to 1000 c.c. being removed. The pre eclamptic patients treated by venesection were delivered of living children and mortality was nil. He advocates venesection in all eclamptic and pre-eclamptic cases.

Persistent Thymus Gland in Exophthalmic Goiter.—Gebele (Beitr. z. klin. Chir.) has frequently observed a persistent thymus or an hypertrophy of this gland in severe cases of exophthalmic goiter. On investigating this matter experimentally he found that this increase of thymus substance is to be regarded as compensatory to the changes in the thyroid, its extent depending upon the severity of these. In his opinion sudden death in cases of exophthalmic goiter complicated with hypertrophied thymus is not due to the latter, but to cardiac failure resulting from compensatory disturbances, that is, to excessive toxemia from thyroid secretion. Hence it is important in every case of Basedow's disease to determine the condition of the thymus by palpation, percussion and the use of the x-ray. If it is found to be hypertrophied, this shows that the thyroid condition is far advanced and that operative intervention will be attended with serious risk, although, of course, the state of the heart is of even greater clinical significance.

Treatment of Rickets by Drugs and Other Remedies.—Marfan (Paris Med.) has considered the treatment of rickets by hygiene, hydrotherapy, and diet, and now goes on to discuss in detail the drugs and other measures employed for its cure. The chief drugs are cod-liver and preparations of phosphorus and calcium. Yellow oil is to be preferred in doses of two teaspoonfuls per diem, gradually increased to tablespoonfuls. Under the age of two it is generally not tolerated. The preparations of phosphate of lime are various, and seem to act as tonics to nutrition and stimulants of the nervous system. The preparations of phosphate of calcium have the disadvantage that they are insoluble and have been recommended to be taken as a powder in the food. Simon considering that they are rendered soluble by the gastric juice transforming them into the chloro-hydrophosphate. The soluble phosphates in common use are the syrup of lacto-phosphate or the chloro-hydrophosphate of lime of the codex, in doses of from one to three teaspoonfuls a day. He finds the hypophosphite of lime (0.10 0.20 gr. per diem) more efficacious. Others have found a solution of tribasic-phosphate, alkaline citrates, and sugar of milk beneficial. Dr. Marfan particularly recommends glycero-phosphate of lime in doses of 0.05 to 0.20 gr. according to age; larger doses seemed to produce nervous excitement. Kassowitz is a great believer in oil of phosphorus given as follows: Phosphorus, 1 cntgr.; cod-liver oil, 100 grm.—one to three teaspoonfuls a day. Others find oil of bitter almonds a better vehicle, and the author recommends this vehicle in preference to ol. morrhuæ. Some deny any therapeutic value to phosphorus in the treatment of rickets and prescribe it altogether, but he finds that it acts beneficially on the general state of health and on the nervous system, but its action on bone seems to be doubtful save in craniotabes of young children, when it appears to cause a quicker consolidation. Others recommend organic compounds of phosphorus from the tissues of animals or vegetables, as lecithin, nucleinate of soda, phytine, but he has not had sufficient experience of them to form an opinion of their value or otherwise. Having been impressed by the value of the glycero-phosphate of lime the Dr. endeavored to find out whether its efficacy was due to the phosphorus or the lime, and prescribed in some cases chloride of calcium, lactate of calcium, and formiate of calcium. The two former he discarded, and after many trials found the following combination most beneficial: Syrup of lemon 150 grm., glycero phosphate of lime (liquid) and formiate of lime aa 2 grm. One to four teaspoonfuls per diem according to age. Hydrochloride of ammonia and chloride of sodium have also been found useful. The former should be given in doses of 0.10 to 0 20 gr. per diem with bicarbonate of soda divided into four doses and discontinued for a few days after eight days. A small pinch of the latter should be added to each bottle of milk, and if the child is at the breast added to the mother's diet. Organotherapy has also been tried in rickets with varying results. The following have been recommended: Bone-marrow, extract of periosteum, and fundamental substance of the bone (results not detailed); thyroid (no obvious result save when rickets has been associated with hypothyroidism, in which case it has acted beneficially); thymus (valueless); adrenalin. He recommends an extended trial to the latter in solution of 1-1000 (one to six drops per diem) by the mouth, but not hypodermically: parathyroid gland (no result). Galvanization of the spine by alternate currents, and hydro-electric baths and electric light (35°-40° F.) for fifteen minutes, followed by a cold douche of ten seconds, have been found useful. The treatment of the deformities depends on the stage of the rickets. In the first stage, before consolidation of the bone has taken place, padded splints, accurately applied, should be used. In cases of genu valgum with slight valgus a laced boot should be worn on walking, the sole raised on the inner side. General and respiratory gymnastics should be employed to remove the thoracic deformity, and lateral suspension on the mother's knee, and appropriate corsets the scoliosis. After the fourth year the deformities, save those of the chest, are usually final. The same remedies as just mentioned should be continued to remove the thoracic deformity, but malformation of the limbs will almost certainly require surgical intervention. In late rickets treatment by gymnastics, orthopædics, and surgical intervention play a greater part than in rickets of early infancy.

Little's Disease.—Mme. Long-Landry (La Clin. Infant) publishes as her thesis her anatomical and pathological investigations on this disease. In the four cases sent to her by M. Variot, she found: (1) A meningo-encephalitis which had attacked the brain about the fourth or fifth month of intra-uterine life, and produced, by the cortico ependymal adhesions, a later atypical development, assuming the form of a congenital porencephaly. The state of the cortex of the brain explained the integrity of the intellectual faculties. (2) A later and more diffuse meningitis accompanied by an inflammatory condition of the opendyma and choroid plexus and resulting in an atrophy and definite destruction of the cerebrum and cerebellar cortex. (3) In the third child, an idiot, inflammation of the meninges. Ependyma and choroid plexus had caused no alteration in the form of the convolutions, but alterations in the structure of the cortex and white matter. (4) Lesions of the same kind as in the preceding cases but with a spinal localization; a meningo-myelitis with scattered lesions, both interstitial and parenchymatous. In spite of the diffusion of the lesions throughout the spinal cord the spasmodic condition was limited to the lower limbs; the upper limbs had merely some uncertainty in movement. These cases prove that Little's disease arises from lesions different both in their seat and in their nature. There are cerebral and cerebro-spinal forms and also the purely spinal form described by Dejerine. The pathological factors are of two kinds—infectious causes which act during uterine life, and the traumatism of childbirth. The presence of contractures will not alone explain the functional weakness; when those are present they mask the motor disturbance which has been described under the name of "choreo athetosis"; considered as superadded phenomena they represent rather an imperfection of voluntary mobility. The evolution of the rigidity towards the paraplegic form and the anomalies of voluntary motility are the consequence of the early involvement of the nervous centres. They represent the functioning of a nervous system stricken in the course of development and adapting itself to lesions by the organization of supplementary phenomena. This physiological interpretation common to all congenital diplegias, whether beginning in intra-uterine life or at the moment of birth, allows of their being placed in one group under the denomination of Little's disease, according to the man who first described them.—British Journal of Children's Diseases.

Infant Feeding in Germany.—Cameron (Guy's Hosp. Gaz.) writing from Finkelstein's clinic in Berlin, points out what he considers to be some fundamental differences between German and English methods of infant feeding. He says that whilst in England the proteid is regarded as the chief difficulty, in Germany it is considered the most innocuous element of milk and the most easily and completely digested. Consequently it is usual there to give for a time the so-called proteid (Eiweiss) milk—cow's milk so modified that it contains twice the amount of casein and about half the amount of fat, sugar and salts. Daily weighing is employed in the case of all artificially fed infants, and the weights are recorded upon a chart side by side with the temperature curve. Below these is a record of the amount of food which the infant has had in the twenty-four hours and its composition. The author then differentiates certain types of disorder and gives the treatment for each. By dyspepsia is meant slight digestive disturbance associated with vomiting and an increase in the number and character of the stools, which are often watery, green and slimy, but without serious loss in weight or much alteration in the temperature chart. In these cases he says it is often sufficient to omit the added sugar to the milk. In more serious cases, for twenty-four hours the infant is allowed only saccharin-sweetened water or very weak tea, followed later by diluted milk to which sugar is gradually increased daily. By the term Milchnahrschaden he understands the condition especially studied by Czerny and Keller. The weight curve shows a more gradual increase in weight than normal, often varying daily. The child is small, pale and feeble, and liable to infections. The temperature is approximately normal, and the stools are bulky, and grey in color. There is no evidence of deficient absorption, but only of disturbance of balance of the calcium and magnesium salts, which are passed in excess, forming soaps with the fat in the stools. The treatment consists in diminishing the amouni of fat and increasfng the carbohydrates. Carbohydrate food disturbances (Mehlnahrschaden) due to excess of carbohydrate are chiefly distinguishable by the retention of water in the body which results. The weight at first increases and then comes to a ftandstill. Hypertonus is common. The appearance resembles that of Bright's disease. There is nothing characteristic about the stools or the temperature. Treatment consists in the substitution very gradually of diluted cow's milk for a part of the carbohydrate food. In the two other forms of disturbance—intoxication (cholera infantum) and decomposition (marasmus), there is, he considers, no especial difference from English methods in the treatment except in the frequent employment of proteid-milk.—British Journal of Children's Diseases.

Abdominal Distension in Infants.—Variot, Barret, and Lavialle (La Clin. Inf.) read a paper on this subject before the Soc. Med. des Hop., based on radiologic exploration and chemical analysis in cases of hypo-alimentation with acroplagy. M. Barret has contrived a special support consisting of a wooden frame, which enables to be examined in the vertical posture. The use of bismuth is unnecessary. The colon, when it contains gas, is visible in nearly every part; it has the appearance of wide, clear zones, segmented by dark lines corresponding to folds in its walls. The presence of these clear zones allows the lower border of the liver to be clearly seen. To differentiate the stomach and colon and define their reciprocal relations it is enough to introduce a certain quantity of milk into the gastric cavity. The stomach outline then becomes visible, and, in order to follow its full extent, it is helpful to incline the infant so that the fluid is displaced along the gastric walls. By this manœuvre, practiced by examining in a lateral position, the precise relations of the stomach and transverse colon can be made out. In a certain number of cases it is plain that besides the distension of the transverse colon, the tumefaction of the liver plays an important part in the formation of the barrel-shaped abdomen. In exceptional cases, in extremely atrophic infants with chronic gastroenteritis, the whole abdomen may be transparent; not only the colon, but also the small intestines are distended with gas. The authors consider that their observations on a hundred infants prove that in the majority of cases distension of the abdomen is caused by gaseous inflation of the large intestine. In four normal infants the composition of the intestinal gas was found to be pure nitrogen; in twelve cases of distension it was nitrogen with a small quantity of oxygen; in cases with intestinal infections there was also carbonic acid and hydrogen, i. e. products of butyric fermentation. There seems to be no relation between the large volume of gas and the absorption of starchy foods, but the nitrogen contained in the intestinal gases may be partially derived from intestinal inflammation. The authors believe that the origin of the gas is in the air swallowed either while sucking the fingers or the teat; they have distinctly seen on the screen the stomach of an infant distended with air while sucking at an imperforate teat. It is highly probable that in acrophagic infants a certain quantity of air, at the time of evacuation of the stomach contents, passes into the small intestine, and finds its way with the chyme as far as the large intestine, where it is stored up under a certain pressure, retained on the one hand by the anal sphincter and on the other by Bauhin's valve. Not all underfed nurslings, however, are acrophagic, nor have abdominal distension; the same condition may be present in the overfed; but it would be a grave mistake to consider all infants with distended abdomens as overfed, and to treat them as such by reducing their ration of food, when in reality it should be increased.—British Journal of Children's Diseases.

Eclampsia without Convulsions of Unconsciousness.—Schmid (Zeit. f. Geb. u. Gyn.) says that the typical changes in the internal organs in eclampsia are degenerative processes in the parenchyma of the kidneys and especially in the epithelium of the tubules, with production of albumin and fat, and local degenerative necrosis; in the liver, hemorrhagic necrosis with thrombosis of the capillaries and the inter- and intralobular vessels: hemorrhage and softening in the brain, membranes, and central ganglia, with with thrombosis of the small vessels; albuminous and fatty changes in the heart muscle and hemorrhage and necrosis of these tissues. There are cases of puerperal poisoning in which convulsions and even coma are 'entirely absent, that still are cases of the kind of poisoning that causes the sympoms of eclampsia. He describes such a case with only slight albuminuria and swelling of the ankles, which died, and at autopsy showed these characteristic changes in liver, kidneys, and brain. He also cites twenty-four cases similar to his own. There were premonitory symptoms of eclampsia, but these were not followed by convulsive seizures or coma. There were relatively often onomalies of the placenta necessitating interference. The prognosis for the child was better in the cases that recovered than in those which died. The author concludes that there is a characteristic pathological condition in eclampsia; when this is found postmortem we must conclude that the cnse was one of eclampsia even when convulsions and unconsciousness are absent.

Nastin Treatment in Leprosy.—Sir Frederick Hodgson, Late Governor of British Guiana announces that numerous patients who have been discharged cured and that a scheme is under consideration for allowing the intermarriage of discharged patients. Two or three years ago, Professor Deycke, the originator of the Nastin Treatment was requested to carry out a practical test of his treatment at the Laper Asylum at Mahaica in British Guiana, and the information received is extractly conflicting. On the one hand we have the reported optimistic statement of Sir Frederick Hodgeson the Governor, whilst on the other hand Dr. Wise the Government Bacteriologist in British Guiana, in a report presented to Parliament, on the Nastin treatment at the Mahaica Leper Asylum, states that he is unable to confirm the very hopeful conclusions arrived at by Professor Defcke himself. He says that while some cases undoubtedly got considerably worse during the treatment, the great majority have remained in statu quo ante, while a few have improved to such a degree that in three cases the results approximated to a cure. He declares the favorable results to have been so few that longer and wider experience can alone determine whether these cases were instances of natural improvement irrespective of Nastin administration, or whether the injections of Nastin played an active part in the disappearance of the leprous deposits. The cases covered by the report number 135 over a p_riod of twenty-two months. The results of experiments made in South Africa with the Nastin treatment have, so far, failed to establish Nastin as a cure for leprosy.—Transvaal Medical Journal.

Miscellaneous.

Among the Medical Journals which are now making a lasting impression upon the thought and method of the profession, there is one to which we desire to call the attentton of our readers. This is Ellingwood's Therapeutist. This Journal occupies a field of its own. It stands by itself. It reaches how to treat each condition the busy doctor finds, at once, successfully, with a single remedy.

The editor, Dr. Finley Ellingwood, has devoted nearly forty years to this study alone, and what he writes is well worth reading. Every physician who allows petty prejudice, to prevent him from subscribing for this Journal, is committing a crime against himself and against his patient.

Medicopsychological Essay on the Causes and Remedies for Criminality Among Children.

H. Dauchez declares that only incorrigible children and those who have been caught repeatedly in crime should have meted out to them the extreme penalty of the law. Reformation is easily obtained under proper treatment if we can get the child to see his responsibility and exercise his will. Society, educators and parents are partly responsible for the fall of these children. The surrouudings into which they get, the neglect of parents, the ideas inculcated by an irresponsible press, the inducements offered by wicked persons, all lessen the responsibility of the child, weak and immature, and often neglected by all those influences which should lead him upward. Still we should not forget that every normal child has a responsibility for his acts. Only among idiots, imbeciles, degenerates, those possessed by obsessions and hallucinations, kleptomaniacs and somnambulists, are acts committed for which they are not responsible. The hypothesis that children are born criminal cannot be sustained by scientific observation. In examining these children the physician should always give them the benefit of the possibility that they were led into crime by others, by the contagion of evil, and by the neglect of parents, allowing them to get into improper surroundings. True impulsion, like obsession, is rare in children.—Archives de Medecine des Enfants.

An Experimental and Clinical Study of Colon Bacillus Infections of the Urinary Tract.

Colon bacillus infections of the urinary tract are always of much interest to urologic students and Koll (The American Journal of Urology) recalls the curious paradox that although the organism flourishes normally in a strongly alkaline medium, yet, when it is grown artificially milk is curdled, which process probably depends on the fermentation of lactose and throwing down of casein by the resulting lactic acid.

He reports the successful treatment of twenty-seven cases of colon infection.

From the experimental work described, he concludes that:

1. Liquor aluminum acetate in a dilution of 2 per cent is an active germicidal and antiseptic agent to the colon bacillus and the colon group of bacteria.

2. Liquor aluminum acetate in 2 per cent. dilution has no deleterious effects upon the mucous membrane of the urinary tract.

3. The germicidal and antiseptic properties are due to the acid radical of the drug, as proven with the experiments with acetic acid.

4. Whether or not the acetic acid produces any untoward action upon the mucous membrane of the urinary tract will be reported upon in a subsequent communication.

5. The internal administration of the subacetate of aluminum raises the total acidity of the urine, which is desirable in dealing with the colon bacillus infections of the urinary tract.

The clinical observations lead us to believe that:

1. Colon bacillus infections of the kidney pelvis, urinary bladder and male urethra are more promptly ameliorated by the 2 per cent. liquor aluminum acetate than by any therapeutic measure previously used.

2. The bacteria in the urethral discharge disappear in from 36 to 48 hours following the instillation with the liquor, but other astringents may be necessary to "dry up" the discharge.

3. Care must be exercised in the preparation of the liquor aluminum acetate, as an excess of free acetic acid will produce unpleasant subjective symptoms. The solution must not be more than a week to ten days old when used.

4. The liquor aluminum acetate is of value only in those cases where the presence of the colon bacillus is proven by cultivation under the most careful aseptic precautions.

State Board Examination Questions of West Virginia.

ANATOMY AND EMBRYOLOGY.

1. Name the bony prominences of the elbow and the ligaments of the elbow joint.

2. Give articulations of the first cervical vertebra.

3. Where is the spleen and what are its uses?

4. Describe the two principal arteries of the forearm and tell how they form the palmar arches.

5. Of what does a vertebra consist? Name the processes and tell what their object is.

6. Describe the stomach.

7. Give a brief description of the facial nerve.

8. Name the muscles of the shoulder and arm.

9. Name the sutures and fontanelles in the fetal head.

10. Give difference in fetal and adult heart.

PHYSIOLOGY AND HISTOLOGY.

1. Mention briefly chemical and physical changes in the air and the blood caused by respiration.

2. Discuss sleep theories, naming three hypotheses.

3. Discuss the origin, function, and fate of the red blood corpuscles.

4. State in percentage ratio of weight of blood to that of body. What percentage of loss may be borne?

5. Define systolic, diastolic, and mean arterial pressure. How determined?

6. Define enzymes and discuss briefly their action.

7. Define protein, carbohydrate, and fat.

Estimate their nutritive value.

8. What is bile? Discuss its physiological importance.

9. Describe histology of a transverse section of the spinal cord at the cervical enlargement.

10. Discuss the histological structure of the blood.

MATERIA MEDICA AND THERAPEUTICS.

1. What is Materia Medica? What is Pharmacy?

2. What is opium? Give its derivatives and dose of each.

3. Give composition of Dover's powder; Fowler's solution; Lugol's solution.

4. Give five principal emetics, dose of each and method of administering.

5. Name five intestinal antiseptics.

6. Give physiological action of urotropin, its dose and method of administration.

7. What is a specific in medicine? Give examples and make therapeutic application.

8. Define anesthesia, give examples of general and local anesthetics.

9. Define pyrexia and hyperpyrexia. How would you meet these conditions?

10. What are the therapeutic indications in intestinal hemorrhage in typhoid fever?

CHEMISTRY AND MEDICAL JURISPRUDENCE.

1. Define Chemistry.

2. How many elements are there? How represented?

3. Give symbols of gold, silver, iron, lead, arsenic, potassium, mercury, calcium, and sodium.

4. Name elementary substances used in their pure state in medicine.

5. Define qualitative and quantitative analysis, with example of each.

6. What are mineral waters? Name three.

7. Define and illustrate an acid, base, and salt.

8. What is a poison? Illustrate.

9. What are evidences of death by drowning?

10. Evidences of rape?

BACTERIOLOGY AND HYGIENE.

1. Classify bacteria and give example of each.

2. Name the bacteria frequently found in soil, water, milk, and air.

3. What are toxins and antitoxins? Give example of latter.

4. What is meant by phagocytosis?

5. Describe sterilization and antisepsis.

6. How would you prepare specimen (diphtheria) to be sent to a laboratory for examination?

7. Describe pure water; how would you render it wholesome when contaminated?

8. Describe the location of well or spring in relation to privy vault or stable.

9. Describe the hygiene of a tuberculous patient.

10. Give causes of air contamination of school room and proper ventilation of same.

PRACTICE OF MEDICINE AND PEDIATRICS.

1. To what class of diseases does chorea belong? Give treatment and name important complications.

2. Give the prognosis and treatment in a case of aortic regurgitation with general arteriosclerosis.

3. Give treatment of acute endocarditis.

4. Give causes, symptoms, physical diagnosis, and treatment of acute croupous pneumonia.

5. Describe causes, tests, symptoms, and treatment of tyohoid fever.

6. Diagnosis and treatment of pleuritic effusion.

7. Diagnose, treat, and give the cause of cholera infantum.

8. Write a prescription for modification of cow's milk for a child three months old.

9. What are the causes of convulsions in infants and children?

10. Give causes and treatment of summer diarrhea.

OBSTETRICS AND GYNECOLOGY.

1. What is the placenta? From what is it formed? What is its structure and what are its functions?

2. Name the bones, straits, and divisions of the obstetric pelvis.

3. What are the diameters of the pelvic outlet? How is it bounded?

4. Describe the fontanelles and their diagnostic uses.

5. What are the signs of pregnancy, probable, doubtful and certain?

6. Interstitial nephritis in a pregnant woman, how would you treat?

7. Name the diseases of the endometrium and state their effects in pregnancy.

8. Define miscarriage, abortion, and premature labor.

9. Describe Crede's method for the delivery of the placenta.

10. Whaf care does the mother require after labor? Define the nurse's duties.

SURGERY.

1. Give the methods of controlling hemorrhage.

2. Mention the uses of iodine in modern surgery.

3. Differentiate fracture of the surgical neck of the humerus from fracture of anatomical neck of humerus.

4. Diagnose and treat carbuncle.

5. Give treatment of shock.

6. Give symptoms and treatment of cholelithiasis.

7. Diagnose and treat Colles's fracture.

8. Give symploms and treatment of erysipelas.

9. Give symptoms and treatment of prostatic abscess.

10. Give snmptoms and treatment of straugulated inguinal hernia.

SPECIAL PRACTICE.

1. Give the symptoms of infantile spastic paralysis.

2. Differentiate between epileptic and hysteroid seizures.

3. Name the causes and dangers of otorrhea.

4. In what acute disease is the ear most commonly involved, and, as a rule, what part of the general structure of the ear is first attacked?

5. Name the conjunctival diseases due to microorganisms.

6. Name four causes of iritis, and note the subjective and objective symptoms.

7. In nephritis where does the effusion of serum first appear? In cirrhosis of the liver, where? In cardiac diseases, where?

8. State the diagnostic value of a blood examination in chlorosis; appendicitis; trichinosis.

9. Give cause, symptoms, pathology, and treatment of laryngismus stridulus.

10. Give symptoms and treatment of nasal polypi.

Vaccinotherapy by Irradiated Vaccines.

Renaud presents a biological study of typhoid vaccine. His vaccines are prepared from cultures of the bacillus of Eberth isolated from the blood of a typhoid patient whose disease was demonstrated at autopsy to be typhoid. Its virulence is such as to kill animals in twenty hours after injection of 7 to 8 milligrams. Forty-hour cultures on glucose are emulsified in physiological salt solution; the emulsion is thus exposed to the irradiation of a quartz lamp for 30 minutes. After this treatment the bacilli have entirely lost their virulence; they are incapable of reproduction and cultures remain sterile. They lose their motility, but undergo no other changes in form. This vaccine may be employed without fear or precautions. It is very easily absorbed when injected under the skin The local reaction is slight and appears after a few hours. The author compares the effects of inoculation of this vaccine and of virus. The injection of vaccine causes but a short reaction; with an equal dose of virus the reactive period is the same. With both there is a primary period of excitation analogous to that of infections of acute beginning, and this excitation arouses the protective mechanism of the body. The author believes that the microbic products, pure and unmodified, are less toxic than has been supposed, which accounts for the larger doses possible. These irradiated vaccines canse an extremely sudden and brief reaction which never causes grave symptoms and they are eliminated rapidly and completely. Such inoculation presents no dangers, and no risks are incurred. Death is never caused by the intoxication. It causes an immunity and the appearance in the blood of antibodies; large doses may be used to obtain immunization. Each new injection increased the bactericidal properties of the blood. More than 40 typhoid patients were inoculated.—La Presse Medicale.

Treatment of Cardiopathies.

Nobecourt says that in the presence of arrhythmia in a child one must not at once think of giving heart stimulants, but should seek out the cause of the arrhythmia, which may be due to changes in metabolism. Arrhythmia and tachycardia may be due not to heart disease but to nervous, orthostatic, or functional causes. They may result from anemia, dilatation of the stomach, constipation or diarrhea. If these troubles are first attended to one will find it unnecessary to give digitalis. There are true physiological arrhythmias occasioned by modifications of respiratory rhythm and nervous influences. Alimentary hygiene, hydrotherapeutic measures, physical treatment, and massage will relieve all of these troubles. All the infectious diseases affect the rhythm of the heart, and this is not always due to a true myocarditis. Applications of ice over the heart act as a tonic to the cardiac muscle. Subcutaneous injections of strychnine and sparteine are useful at the same time. The infectious diseases also cause a nephritis which brings about heart lesions. In cases of mitral insufficiency, as long as compensation is good, medication is useless, even harmful. Exercises should be neither too severe nor too slight. Rapid asystole may result from gastric troubles. Repeated acute attacks of rheumatism cause cardiopathies. Here respiratory gymnastics and graduated exercises of the arms and legs are valuable.—Annales de Medecine et Chirurgie Infantiles.

Frequency and Pathogeny of Crural Hernia in Children -Case in a Child of Ten Years.

Rocher and Dantin state that crural hernia exists in children, although rare. Its maximum frequency is between the ages of ten and twelve years. Its pathogeny is allied to an anomaly of the internal part of the crural ring, a dysplasia of the crural septum, or ligament of Gimbernat, or to the presence of a performed cul-de-sac. The author's theory of its occurrence gives the origin to a failure of the parietal region of the abdominal wall, while that of Murray gives it a serous origin. The authors believe that both of these theories have their application in certain cases. They have a common point, namely, congenitality of the lesions. Sex has not a marked effect on the occurrence of this variety of hernia. These hernias are generally single, rarely double. They generally occur gradually, and are not recognized early in their occurrence. The authors give histories of two cases in which the hernia was of considerable size and appeared gradually.—Gazette Hebdomadaire des Sciences Medicales de Bordeaux.

Our readers will note in this issue for the first time the artistic advertisement of Palpebrine. The safe and reliable remedial agent in all external inflammation of the eyes. This product is manufactured by the Dios Chemical Co., who have, during the last quarter of a century, manufactured exclusively for physicians, Dioviburnia, Neurosine and Germiletum, the reliability of which is generally recognized.

No new and untried drugs enter into the composition of these specialties and their formulae have always been communicated to the profession. Palpebrine will fill a long felt want of the general practitioners, who can themselves treat with this product, safely and successfully, external inflammation of the eyes.

The Dios Chemical Co., of St. Louis, will mail free, trial bottle of Palpebrine on application.

Predigested beef is the foundation of Nutrient Wine of Beef Peptone, a palatable and serviceable liquid food. To protein and carbohydrates are added the stimulating properties of meat extractives. The physician will be pleased with Nutrient Wine of Beef Peptone in cases where the patient's stomach will not appropriate ordinary diet and where the digestive organs demand rest or assistance.

Prevalent Diseases.

Each change of season brings with it, its diseases seemingly peculiar to the time.

Summer with its intestinal disorders, sunburn, insect bites, ivy poisoning, etc.

Fall presents for the attention of the physician, its typhoid cases and winter and early spring, its regular quota of pneumonic, bronchial, throat and other chest conditions.

At this season, when pneumonia and bronchitis demand the call of the physician, literature presenting the experience of fellow practitioners, in the successful handling of these cases, would seem most apropos.

The Bloodless Phlebotomist for January reflects the experience of many physicians upon this timely subject.

Dr. Charles Buck of Cincinnati presents his experience in handling cases of pneumonia, also relates some facts in the treatment of lumbago, which might also be considered as an affliction prominently manifesting itself at this season.

"Broncho-Pneumonia" with supportive as well as local treatment in all its details, is the subject of the paper of F. A. Kautz, also of Cincinnati.

Dr. E. Clinton Murray, of Houston, Texas, relates his experience and treatment in a case of pneumonia in an eighteen months old baby, and Dr. J. C. Klippinger, of Independence, Kansas, presents a "Different Technique in Pneumonia." which is decidedly original. In abstract his method is to apply the local dressing in a manner which gives the intercostal muscles a chance to functionate without restriction from bandages. This symposium is closed with a paper from Dr. W. A. Radue, of Union Hill, N. J., upon "Acute Pleurisy and a Successful Abortive Treatment."

Besides the papers referred to, upon the subject of chest and throat diseases, much additional information is given. The one in particular we would have you note is the "Rational Influence of Hot Applications" by that well known therapeutist Dr. Finley Ellingwood, of Chicago, Ill.

A postal card addressed to the Bloodless Phlebotomist, No. 57 Laight Street, New York, will bring you a copy of the January issue.

Tuberous Sclerosis.

The nature of the kidney tumors met with in at least 60% of cases of this disease is so uncertain that Fischer's paper (Ziegler's Beitrage, Bd, 1, Hft, 2, 1911) giving the results of eight post-mortem examinations, is welcome. The tumors, he finds, are mixed growths consisting of non-striped muscle, fat, arteries, and sometimes primitive kidney cells in variable proportions. Such names as lipomyoma, angiolipoma, fibrolipomyoma, lipomyosarcoma, etc., (which have been applied to them by various writers) are therefore natural enough. They are not, however, malignant; and metastasis does not occur. They cause, as a rule, no symptoms during life. In some cases the tumors are associated with mal developments of the kidneys. Fischer also draws attention to the not infrequent association of kidney tumor with lesions of the brain other than tuberous sclerosis, instancing cases of glioma psammoma, and psammolipoma in which tumors of the kidney, or cysts, were found. Further than that both gliomata and the kidney tumors in question have a developmental origin he has no suggestion to make as to why the two lesions are associated.—Edin. Med. Journal.

A Case of Epidemic Cerebro-Spinal Meningitis in an Infant, Aged 9 Months.

L. Consiglio reports this case, which ended fatally, and discusses the question of diagnosis and treatment. He considers that these are cases of purulent cerebrospinal meningitis in which it is not possible to make a diagnosis without lumbar puncture, which affords valuable information by way of enabling the epidemic form to be differentiated from others. A safe criterium is also afforded by the serum reaction, which by its simplicity is a good substitute for bacteriological investigation, which is difficult and not always possible. The discovery of Weichselbaum's meningococci is of no prognostic value. In the same subject affected with the disease we may find meningococci which differ in morphological and cultural characters; hence the various types admitted by many authors must be considered simple modifications of one and the same micro organism, i.e., the meningococcus. Lumbar puncture is the only efficient method of cure in epidemic cerebrospinal meningitis, and treatment by serum is hopeful provided it is adopted early. The specific agent is found in the respiratory passages of individuals in immediate contact with the patient without their presenting any morbid phenomena, and this explains the transmission of infection.—British Journal of Children's Diseases.

The Treatment of Convulsions in Infants.

One of the most frequent morbid conditions encountered in the treatment of the diseases of child life is convulsions.

The treatment of convulsions very naturally resolves itself into two indications—the removal of the cause and the institution of those measures which relieve the congestion of the brain.

A study of the case in hand will reveal the causative influences and suggest those remedies that are indicated to remove the cause. Where the stomach is full of indigestible foods it must be emptied, and in a like manner other remedial measures must be addressed to the removal of the cause.

It is highly important that the physician go to work with the most earnest efforts to relieve the convulsive seizure. The inhalation of chloroform is useful in some cases. It should be given until there is no convulsive movement. I put all infants as soon as I see them in a bath of warm water, and give them a dose of Neurosine. This agent speedily overcomes the congestion of the brain and the child falls into a peaceful sleep from which it usually awakens with a clear head and no tendency to convulsions. Besides this, Neurosine contains no opium, chloral or morphine, and it is, therefore, admirably suited to these cases.

Functional Heart Diseases

Including tachycardia, palpitation, arythmia and the conditions resulting from the use of coffee and tobacco, are promptly controlled and corrected by the use of Cactina Pilletts. Safe and free from all ill effects, the efficiency of Cactina is shown in the relief and benefit it affords.

Atonic Indigestion

Demands the most vigorous tonic treatment available. For many years, Seng has held a unique place as a gastrointestinal tonic, and under its use the most far reaching benefits are obtainable in all functional diseases of the stomach and intestines.

An Ideal Laxative

Is one that does not gripe nor give rise to reactionary constipation. Such is Prunoids, the most pleasant and reliable remedy at the command of the profession for the effectual regulation of the bowels.

Sea-Water Injections in Toxaemia.

Macfean and Harston, in The London Lancet; mention a patient, a married woman, aged 60 years, who suffered from toxaemia of uncertain origin, manifesting itself in pain in the joints and muscles, foul tongue. constipation, and a temperature of 100° F. Ordinary treatment had no effect, and her condition became worse. emaciation increased, there was continuous low fever, and later blood and mucus were passed in the stools. Bacillus coli vaccine was tried without any result. Finally injections of sea-water were given, 25 to 50 c.c. being injected, under strict aseptic precautions, in the right scapular region. These were given twice weekly for 30 injections. The temperature soon fell and remained at normal, the patient increased in weight, sleep became natural, and all the symptoms gradually disappeared. After six months' treatment she was quite well. The author suggests that there are certain conditions which are benefited by an increase of sodium chloride, and thinks that the sea-water treatment is worthy af a more extended trial in such cases.

Wassermann's Reaction in Children.

Francioni and Menabuoni (The British Journal of Children's Diseases) after practicing this reaction in many cases, found it positive in the first few days after birth before objective symptoms were present. It was invariably positive in hereditary lues and continued so for many years, being little affected by treatment. It had, however, a limited value as proof of indirect hereditary influence on the offspring. They cautioned against regarding a positive result as an absolute indication for active treatment, since the reaction remained positive after repeated and energetic treatment.

Spolverini asked if the authors had practiced the cuti-reaction to tubercle when they had found Wassermann's reaction positive in children under one year without symptoms of syphilis. It had been asserted that in syphilitic adults the cuti-reaction was more marked than in those suffering from tuberculosis.

Cacioppo had found Wassermann's reaction positive in children with clinical symptoms, but not constant during the period between birth and the appearance of these symptoms—a period of the greatest importance as regards early diagnosis and prophylaxis.

Francioni, in reply, said he had made no special observations as to the relation between Wassermann's test and the cutiretion.

Acetonuria in Childhood.

The acetone bodies—beta-oxybutyric acid, diacetic acid, and acetone—are known to be present occasionally in the urine of children, under the following circumstances: (1) in diseases in which gastrointestinal symptoms (diarrhea, vomiting, or constipation) are prominent, e.g., in pneumonia, tuberculous meningitis, infantile diarrhea, etc.; (2) in cases of so-called "cyclical vomiting"; (3) in conditions in which fever is present; (4) in intoxications such as diabetic coma, postanesthetic poisoning, and salicylic acid poisoning. Upon examination of the urine of 662 children, after admission to the hospital, the author found that a temporary acetonuria frequently appeared, which bore no relation to any disease process present at the time. Careful inquiry into the cause of the disturbance disclosed the fact that it was due to altered diet. In cases where a change was made from the previous diet acetonuria resulted; in those in which no change, or but little change, was made acetonuria was comparatively rare. In the majority of cases, the author concludes, the carbohydrate starvation necessary for its production is caused by a temporary failure of digestion, brought about, in turn, by the change of diet. About three days are required before the digestive processes can accommodate themselves to the change. The younger the child, the more easily is acetonuria set up; the digestive instability becomes less marked as age advances.

Upon comparison of the percentages of cases in which acetonuria developed in various diseases, the author found marked uniformity in the incidence of acetonuria with the exception of typhoid fever, only two cases of which out of 13 (15.3 per cent.) showed acetonuria, whereas in the case of other diseases 60 per cent. or over showed this symptom. The author thinks this fact may be of use in the diagnosis of typhoid fever, which is often difficult in children, especially as Widal's reaction is frequently not positive until convalescence.—The London Lancet.

A Fine Line of Sterilized Solutions.

Hermetically sealed glass ampoules containing sterilized solutions of important drugs for hypodermic use have assumed a commanding place in medicine in a comparatively short period of time. Two or three years ago, seeing the tendency in this direction, Parke, Davis & Co. brought out a modest line of something like a half-dozen formulas, notable among them being solutions of Adrenalin, Codrenin, and Cacodylate of Sodium. From this small beginning the line has expanded until now the company announces a total of about twenty distinct formulos. The full list, we understand, is now appearing in display advertisements in the leading medical journals of the country. Physicians who are interested in this advance in hypodermic medication—and every physician ought to be—will do well to search out these advertisements and familiarize themselves with the comprehensive line of solutions therein offered.

Solutions provided by the gaseptic ampoule, it is obvious, have several advantages over those prepared in the ordinary manner. They are ready for immediate use: there is no necessity to wait until water can be sterilized and cooled. Accuracy of dose is ensured, each ampoule containing a definite quantity of medicament. The solutions are aseptic; they are permanent.

The Feeding of Babies with Undiluted Citrated Milk.

H. C. Mann (Guy's Hospital Gazette) gives an interesting account of his experience of the routine feeding of infants on citrated whole-milk, which he has practiced for the past three years. During this period some 400 cases requiring directions in feeding have passed through his hands, and in only half a dozen instances has he been obliged to adopt any modification of the whole-milk regime. Such an experience is a strong testimony to the value of this method of artificial feeding, a method which, owing to its simplicity and cleanliness, is conspicuously suited to hospital practice. Dr. Mann proceeds to give the weight records in eighty-nine cases, in each of which there had been loss of weight on other diets. Throughout his work the author has made use of sodium citrate in the proportion of one grain of the drug to each ounce of undiluted milk—half the dose, that is to say, that has been employed by most who have made use of citrated milk, whether whole or diluted, In stating that he knows of "no other published series of cases in which undiluted milk has been universally employed," the author has overlooked Dr. F. S. Langmead's paper in vol. iii of the Proc. Roy. Soc. Med. on "eighty consecutive cases of wasting infants fed on undiluted citrated milk" vide British Journal of Children's Diseases, 1910, vii, p. 219). Dr. Langmead, who, we believe, was the first to point out the value of citrated whole-milk in infant feeding, published his first paper in March, 1908.—British Journal of Children's Diseases.

Obstetrical Problems.

Routh states that the mortality both in utero and soon after birth is still far larger than it should be. The accoucheur is responsible for the newborn child, during at all events the first fortnight of life, and in that period nearly one-third of those children who do not survive their first year lose their lives. Progress in the knowledge of the physiology of menstruation, labor, and lactation, and of the causation of the toxic diseases of pregnancy and the puerperium, will not be possible without the aid of the physiological chemist. Obstetricians are still ignorant of the biochemical changes in the blood which influence the cylical functions of menstruation and ovulation, or which have to do with the implantation of the fertilized ovum and the onset of labor and lactation. Little is known also of the autotoxæmias lying at the basis of pernicious vomiting, puerperal albuminuria, eclampsia, chorea gravidarum, and puerperal insanity. The blood serum of pregnant women hinders the proteolytic ferments, as trypsin, while placental serum has a marked power in destroying cancer cells. Excess of lutein tissue is associated with hydatidiform degeneration of the chorion, while destruction of the lutein tissue prevents implantation of the ovum.—The London Lancet.

Radiotherapy and the Artificial Menopause in the Treatment of Fibromata and Hemorrhages at the Menopause.

Oudin and Zimmern claim that in radiotherapy we have an efficient method of control for the hemorrhages of the menopause, whether they result from sclerosis, congestion, or fibromata. The rays used after a few applications affect the Graafian follicles and cause atrophy, while leaving the internal secretion intact. A premature menopause natural in type is created, and the mucopurulent discharge and edema of the legs and feet are relieved along with the hemorrhages. In the case of young and small fibromata the size of the growth is reduced from one-third to one-half. In older and larger fibromata and in the subserous type the action is not so good. There is no tendency to obesity caused by the treatment. The effects are not so good in cases under the menopause age as in those of women having fibromata at that period. —Journal de Medicine de Paris.

The following letter was recently received by the editor of the Journal:

To Dr. Edward C. Register,
Charlotte, N. C.,

Dear Doctor:—Received a copy of your journal last evening, and made directly for the editorials. I congratulate you upon the stand taken towards the recent Rockefeller standardization of the systems of medical education. I congratulate you, not because you express admirably my ideas upon this subject, but because I feel that you are saying the truth. When you speak of "the inspiration to become students, not doctors" you are voicing the yearnings of many truth-loving, humanitarian general practitioners. Students of medicine in our large, well equipped schools are being taught directly, and indirectly by daily suggestions, that upon the acquisition of the diploma the doctor can stand forth and hold forth as a finished product. Instead of using the medical school course as an introduction into the science and the art of medicine; instead of filling their lamps with the never-dying fuel of inspiration and love and of divine unrest for perfectibility, present day teachers of medicine teach with too much finality and self-complacency. The result is and will be the appearance of snobs in our ranks, and I believe they are pouring in fast from our first-class colleges. I am very glad that you raise your pen so powerfully in this cause. You are doing work, old boy, and although I have never seen you I feel now like "patting" you on the back; and saying: well done, keep it up; you are not fighting in vain; bravo.

Yours as ever,

J. F. HULTGEN.

The Disintoxication Cure.

Dr. Bignon in Le Nord Medical has some remarks to make upon the therapeutic value of the treatment introduced by Dr. Guelpa, under the name of "La cure de desintoxication." It consists in a water diet for three or four days, with the odject of getting rid of toxins and worn-out tissues of the body, and in repeated purgation to disinfect the intestines. The inventor recommends that a bottle of some purgative water be taken daily, lukewarm, for three or four days, or an ounce to an ounce and a half of castor-oil followed by a litre of "tissue"daily for the same period. During this time the patient is deprived of all food and only allowed boiled water or some feebly mineralised water or weak tisane, with or without sugar, the object being to increase the secretion of urine and the sudoriferous glands. Fasting is uncomfortable at first, producing lassitude and general fatigue, which are however relieved by the purgation, a fact which makes the inventor believe that hunger is not brought about only by the desire of the organism for material to repair its losses, but also by toxic substances accumulated in the intestines. The cure lasts four days, of which the first is the hardest to endure, and on which headache and vertigo may be exerienced. After the cure the patient should take to a milk diet, then to one of milk and vegetables. before resuming his ordinary life. It may be necessary to repeat the treatment two or three times before lasting benefit is experienced. It has been found particularly beneficial in cases of glycosuria and diabetes, in which it has to be repeated three or four times at weekly intervals. It has also been tried with hopeful results in cases of epilepsy and certain ocular affections.—The Hospital, London.

Tracheobronchial Adenopathies in Children.

H. Grenet considers the study of tracheobronchial enlarged glands of great importance. They are always present in young tuberculous subjects and are not easy to diagnose. There are other forms of infectious adenitis that are not tuberculosis. All pulmonary affections are accompanied by enlarged tracheobronchial glands. These may be secondarily invaded by the tubercle bacillus. Typhoid fever, mumps, and serious infections of adenoid growths and tonsils also produce enlarged glands. They are found in hereditary syphilis and in leucemia. Tuberculosis is the main cause of tracheobronchial adenopathy, which is never absent in tuberculosis of childhood. It is also found in nursing infants. They are occasionally infected from the intestines although more rarely than from above. Tracheobronchial adenopathy, although secondary, constitutes almost the only focus for bacilli and may be the point of departure for pulmonary or generalized tuberculosis—Annales et de Medecine Chirurgie Infantiles.

Thyroid Gland Dosage.

The doses in which thyroid is usually prescribed are, the author rightly states, many times too large. The ordinary dose is officially quoted as from 3 to 10 grains (4 grains, U. S. P.). Very few people, except certain types of lunatics, will tolerate such doses under any circumstances, and not even they are able to do so unless this dose is arrived at by a gradual increase from small beginnings. It is a clinical fact, well recognized by those who have any real experience in the use of the drug, that, the more the patient requires thyroid extract, the smaller should be the initial dose. Since the author has been using it he has been driven back and back in the dosage, and now seldom begins with more than ¼ grain three times a day. He never prescribes a larger dose than 5 grains three times daily, and then only in prounced myxedema after several weeks' treatment. He has had many patients who were unable to take more than 1-20 grain once a day, but this was in each case sufficient completely to protect them from the symptoms of which they originally complained. In connection with the "allotropic diseases" (rheumatism and allied states, including chorea), he suggests that the prophylactic dose for an adult should not exceed 1-10 grain three times daily, and that ¼ grain three times daily is a sufficient therapeutic dose to start with.

The case is reported of a girl aged 10 suffering from severe chronic chorea in whom thyroid medication proved successful. Large doses of Fowler's solution, ordinary doses of arsenic in combination with fluid-extract of ergot, and salicylate of sodium having all been tried without benefit,—the arsenic, indeed, provoking active symptoms of intolerance,—thyroid extract in doses of ½ grain three times daily was then administered. At the end of a week the movements had completely ceased, and the child felt better and seemed brighter than she had done for months. In another child, this time with acute chorea (her second attack), thyroid medication in similar dosage, together with rest in bed and meat-free diet, led to abatement of the movements in a few days and to their entire cessation in three weeks.—Leonard Williams, London Practitioner.

Catarrh in Children.

Upon examination of the fauces of children suffering from loss of appetite, gastric derangements, spasmodic conditions of the air tubes, and obstinate coughs, the author found a postnasal catarrh to be present in a large number of instances. In his paper he gives an admirable description of this condition and of the various disturbances secondarily resulting from it. The catarrh is often confined, he says, strictly to the nasopharynx. It may give rise to none of the usual signs of a "cold," and escape notice for weeks or even months. Upon inspection the fauces vary in appearance according to the intensity and duration of the process. The posterior pharyngeal wall shows more or less thickening and reddening and is often uneven from shallow projections of the surface. It is moist and is frequently covered with thick yellowish mucus, which may be seen flowing down from above. In bad cases enormous quantities of this mucus may be secreted, and, as it is all swallowed, it easily sets up gastric irritation. Bacteriologic examination of it shows a great excess of the Micrococcus catarrhalis, mixed, in the various specimens, with Friedlander's bacillus, the Bacillus septus, and more or less numerous staphylococci. Sometimes the uvula and soft palate are thick-looking and congested, but the tonsils are not necessarily enlarged.

One of the commonest consequences of this persistent postnasal catarrh is complete loss of appetite for solid food, though fluids, such as milk, may be taken readily enough, and deficiencies of nutrition, therefore, not be very apparent. In some cases there may in addition be periodical attacks of gastric disturbance,—among them not a few examples of the so-called "cyclical vomiting." The child every month or six weeks is taken more or less suddenly with an attack of vomiting, accompanied by fever, probably due to an acute exacerbation of the catarrh, with swallowing of acrid, foul secretions and the setting up of septic fermentation in the alimentary canal. Such septic infections may also be the cause of serious inflammation in distant tissues, including meningitis, appendicitis, otitis, iritis, retinitis- and perhaps poliomyelitis.

The postnasal irritation is also a common cause of spasms of the air passages (stridulous laryngitis and laryngismus stridulus), as well as of general convulsive attacks. In children less than 2 years old and those of neurotic tendencies who have passed that age, rapid rises of temperature with early and correspondingly rapid fall may be induced, especially toward the end of digestion, a couple of hours or so after food.

Acute enlargement of the cervical glands is another common consequence of postnasal catarrh.

The production of otitis through extension of the trouble by the Eustachian tube is well recognized. By spreading downward, on the other hand, the process may induce laryngeal and tracheal irritation. The child becomes subject to attacks of violent cough, which may come on at any time, but are especially liable to occur at night. The attacks may last twenty or thirty minutes, and end in vomiting efforts in which a large quantity of mucus is brought up. Such attacks may in some cases be mistaken for whooping-cough.

In the treatment of these various disturbances the condition of the throat, to which they all owe their origin, must be promptly remedied. The local treatment may take the form of drops instilled into the nostrils and allowed to trickle down into the nasopharynx, or remedies applied directly to the fauces with a throat-brush. If the catarrh be very acute, the throat should be painted several times daily with boroglyceride, or, in older children, sprayed with a weak solution of tartrated antimony in water (gr. ¼ to the ounce) while the patient inspires deeply. Later the paint may be made more astringent by combining with the boroglyceride an equal amount of glycerite of tannin. Where the painting cannot be carried out owing to the resistance of the patient, a useful though inferior substitute for it is to instill some drops of a mild antiseptic solution into the nostril several times a day as the child lies on his back with his head supported by a pillow. A solution of resorcin in normal saline (5 to 10 grains to the ounce), or of boric acid (10 grains to the ounce of water), or of sodium bicarbonate (15 grains to the ounce) may be used, or any other weak antispetic which is not injurious to the stomach when swallowed. As the redness of the pharynx fades stronger applications may be employed, e.g., pure glycerite of tannin, or a paint made of 12 grains of iodine and 15 grains of potassium iodide to the ounce of glycerin, flavored with 5 drops of oil of cinnamon or peppermint. A good astringent iron paint is made by adding 1 dram of the stronger perchloride of iron solution to the ounce of glycerin, but this should be used only after all trace of redness has disappeared, when it is very efficient. In cases with complete anorexia the appetite usually returns when the flow of mucus into the stomach has been stopped. If not, the symptom rarely resists a good iron tonic, especially if this be combined with a stay in the country or at the seaside.

Other consequences of the catarrh quickly disappear upon energetic treatment of the throat. During the period of recovery and for some time after special care should be taken to keep the child adequately protected from cold, in order to avoid recurrence of the catarrhal trouble.—Smith, The London Lancet.

Residual Urine in Old Men.—Miller (The London Practitioner) puts the question: Why should old men have residual urine, which, increasing and giving rise to retention, with a dilated bladder, ends in catheterism and perhaps prostatectomy? In discussing this query, he says that it is remarkable that this condition is usually found in men of advanced life and that the patients are somewhat feeble. It is true that the presence of an enlarged prostate may be a factor. That the last alone is not always responsible for the symptoms is borne out by the records of many cases in which the prostate is practically normal in size, and by the consideration that cases with enlarged prostates may have perfect control of the bladder.

He says that the use of the senile retention may be a deficiency of effort on the part of the patient, due either to laziness, impatience or indifference. Basing his method of treatment on this assumption, the author has been in the habit of advising such patient to make a special effort to produce complete voluntary evacuation. The Dr.'s results were remarkably good, so that the symptoms due to retention completely disappeared in a number of cases.

His conclusions are the following:

1. "Residual urine (in the absence of organic obstruction) is the result of not emptying the bladder thoroughly.

2. This is due to insufficient effort being made.

3. Residual urine can be got rid of by making another or greater effort to pass it.

4. The bladder can be thus trained to thoroughly and systematically empty itself.

5. As a result of this the patient is saved from the necessity of having to rise out of bed during the night, and may also be saved from catheter-life."

True Diverticula of the Lateral Wall of the Bladder.—Sugimura (Virchow's Archiv.) says that it is well known that the lateral vesical walls are the favorite sites for the occurrence of true diverticula. As a rule these lie above and to the outer side of the ureteral ostia. Englisch considers the neighborhood of the intramural course of the ureter as a rare but nevertheless characteristic situation of true diverticula.

When the walls of the diverticulum contain a well-developed muscular layer, then we are dealing with the true or congenital type.

As for the method of development of these pockets, one of three processes may be considered as obtaining in any given case.

1. The diverticulum may be completely preformed.

2. There may be a congenital malformation which only leads to pocket formation after many years of increasing vesical pressure through obstruction.

3. The bladder wall may be normal, or there may be simply muscular weakness which, under certain conditions (stone, pressure, etc.), leads to the formation of diverticula.

The author's case leads him to believe that he was dealing with one of the varieties in which a congenital malformation develops into a true diverticulum by virtue of mechanical causes.

Obstinate Pruritus Cured by Excision of the External Organs of Generation.—Cole (New Orleens Medical and Surgical Journal) treated a case of obstinate pruritus by removal of the clitoris, the labia minora, and a part of the vestibule and labia majora, with immediate relief of symptoms. The case is reported four months after this radical procedure. In the particular case which he records the etiology is obscure. The general itching had lasted for three years with periodical exacerbations not particularly severe. The attacks grew more frequent, and six months immediately preceding operation the itching was almost constant and was intolerable, causing loss of sleep and a condition of profound despondency. Medical treatment and curettement had been perfectly futile.

Treatment of Pleurisy.

The indication for puncturion a pleural exudate may be vital or it may be determined by the amount of character of the fluid or the chronicity of the case. The socalled primary pleurisies with effusion can be evacuated in almost any stage without doing harm, while greater care is necessary in the case of exudates complicated with pulmonary tuberculosis, when the small operation should be postponed as long as possible. The early puncture of a serious exudate may shorten the disease and prevent the formation of pleural thickenings. It is impossible to lay down any definite rules as the time for puncture, as in some cases the pleura is already considerably thickened after 3-4 weeks. One disadvantage of early puncture, according to H. Arnsperger, is the formation of adhesions between the inflamed pleural surfaces, but this can now be prevented by the insufflation of air. Marked thickenings are often seen in cases treated by means of autoserotherapy. In this method 1 to 3 Cc. of the fluid are drawn off and injected under the skin of the patient, if necessary every second or third day. The value of this method has not yet been definitely decided. It is a wellknown fact that many exudates will disappear rapidly without treatment and that others. again, will become absorbed it a small amount of fluid is withdrawn. It is therefore by no means settled that the reinjection of small amounts of the exudate under the skin will add something to the body which will assist the cure. This treatment is however, perfectly justified, since it is very simple and certainly harmless, and the thickening of the pleura can usually be prevented by injecting air. The simplest method of introducing air is to remove the fluid by means of aspiration, then to disconnect the needle and to let the patient take deep inspirations. A pneumothorax will result, but the air will slowly be absorbed, while the actual pleuritis subsides. It is better still to use warmed and filtered nitrogen and to employ a special apparatus, so that the volume of gas can be controlled (300 to 400 Cc.). A noval method consists in the introduction of a cystoscope into the pleural cavity, which allows of an inspection of the pleura. A weighted ureteral catheter is then passed through the tube to the diaphragmatic surface. In this way remnants of fluid can easily be aspirated. The entire process of aspiration and insufflation of gas can be easily controlled with the fluoroscope. Autopsies witnessed by the author prove without doubt that the insufflation of gas is a sure way of preventing the formation of adhesions, thickenings and other disagreeable signs of chronic pleuritis. In empyema, resection of the ribs is to be preferred, though good results have been seen from aspiration in tuberculous empyema with pulmonary tuberculosis. Hemorrhagic exudates should not be aspirated too early, but after expiration the insufflation of air is also indicated. It is probable that the introduction of air will also do good in the severe types of dry pleurisy.—Therap. d. Gegenwart.

Biological Treatment of Peritonitis.

By biological treatment of peritonitis F. Kuhn means the introduction of a certain amount of a syrupy solution of sugar into the peritoneal cavity. The sticky fluid will adhere closely to all the loops of the intestines and prevent the formation of adhesions. A still more important property of sugar, however, is exerted upon the colon bacillus, which is usually present in peritonitis, in that it directly opposes proteolysis and the formation of toxins. It has been known for a long time that a culture of the colon bacillus on a sugar medium is much less toxic than a culture on the ordinary media. In addition, sugar has distinct anti-bacterial properties and also stimulates the formation of anti-bodies on part of the organism. Certain physical and osmotic processes will also come into play and the formation of fibrin is considerably diminished. In practice, the author uses as an irrigating fluid in peritonitis a solution containing salt 0.9 and glucose 4.1 to 100 Cc. of water. It is probable that still better results will be obtained if, instead of irrigating, more concentrated solutions of sugar are merely injected into the peritoneal cavity. —Muench. med. Woch.

Experience with Styptol.

In former years the sovereign drug for all forms of uterine hemorrhage was ergot. Ergot has; however, steadily lost in popularity owing to inconstancy of action and a number of most undesirable after-effects. An excellent and efficient substitute, according to Magerstedt, is styptol. While ergot contracts the uterine muscle, styptol will slow the blood current and contract the vessels of the genito-urinary organs. The latter process is not painful and the general slowing of the blood streams is explained by a special sedative action peculiar to the drug. Chemically, styptol is the phthalate of cotarnin and it is probable that both components participate in its action. Disagreeable after-effects were not seen since the toxic dose is considerably higher than the therapeutic. The drug was employed 24 times after miscarriage (6 to 8 tablets). There never was any pain, the hemorrhage always ceased on the first day and the uterus contracted rapidly. It was also prescribed five times after artificial delivery; a remarkable feature here was the small amount of blood lost and the prompt involution of -he womb. In menorrhagia of various causes the action was also all tkat could be desired. Even with maximum doses (10 tablets daily) no untoward symptoms were complained of. Ergot could be dispensed with altogether except in one case where the patient complained of increased difficulty of hearing after styptol, an observation that requires further confirmation. Good results were also seen in a ruptured varix and in bleeding from piles.—Deutsch. med. Zeit.

Salicylates in Rheumatic Affections.

A. F. Voelcker, in a paper on the limitations to the successful employment of salicylates in rheumatic affections, said that it had become a habit to treat all rheumatic affections with the salicylates. Certain of them responded admirably, but there were also quite a number of undoubtedly rheumatic manifestations in which the salicylates proved useless. The most striking benefit of the salicylates was shown in their influence on joint pains, and persistence of pain after adequate administration should always suggest the possibility of the arthritis being gonococcal or septic in nature, or to the pain being due to an anterior poliomyelitis. The pain of acute rheumatic arthritis ought to yield within twenty-four hours to the administration of 10 grains of sodium salicylate with 20 grains of sodium bicarbonate, given every two hours for three doses and then every four hours. Pains about fibrous structures after an acute arthritis were often intractable to salicylates, but yielded to local applications of oil of wintergreen or to potassium iodide internally. The pain of pleurisy and of pericarditis was uninfluenced. Joint effusions when aggravated by movements proved intractable, even when they contained the Diplococcus rheumaticus. The pyrexia of acute polyarticular rheumatism was generally controlled within three days, but in the rheumatic state there was often a pyrexia ranging through two degrees, which continued even for weeks, and was unaccompanied by any obvious manifestation of rheumatism. Such pyrexia was often influenced by the salicylates, though it might yield to salol. The employment of the salicylates in rheumatic hyper-pyrexia was waste of voluable time. The cutaneous manifestations of rheumatism were uninfluenced. Neither the various forms of erythema, purpura, nor erythemo nodosum appeared to be influenced, and these manifestations had occurred while patients were actually taking the drug. The subcutaneous nodules described by Barlow and Werner were undoubtedly rheumatic in nature, but they were quite uninfluenced by the administration of the salicylates. He had failed to find any successful treatment for them. The similarity of their structure to that of the inflamed valves of the heart in rheumatism, as pointed out by Cheadle, was a powerful argument against the utility of the employment of salicylates in endocarditis or pericarditis. The danger of upsetting the stomach with the irritant salicylates must be borne in mind in the treatment of all heart affectsons, as also must the risk of acidosis. —Brit. Med. Jour.

A New Surgical Dressing.

Excellent results have been obtained by Stumpf from the use of sterilized bolus alba in all infected wounds or wounds liable to infection. The sterilized powder is now supplied sewed up in bags of various sizes, so as to fit any part of the body. Clean wounds will heal rapidly without any reaction and infected wounds will rapidly become clean. In more severe phlegmons, it is advisable to make free incisions so that the powder can act upon many parts at once. Where the wound is already crusted over, the bolus bag may be moistened with boiled water, for the powder acts just as well when wet as when dry. A frequent change of dressing is absolutely necessary, and is the only disadvantage of this method of wound treatment. The dressing is indicated in large transplantations, and whereever it is imperative to increase the vitality of the cells and to ward off or combat infections. No specific action is seen in clean wounds where it is only necessary to stimulate the granulation. The addition of other drugs to the bolus is as a rule not necessary. —Muench. med. Woch.

Treatment of Basedow's Disease.

Saenger lays down as a rule that every case of Basedow's disease should at first be treated internally, but if after a reasonable time the improvement is not so pronounced that the patient can resume work, the case should be turned over to the surgeon. The first principle in internal treatment is to create favorable surroundings and to send the patient to the mountains wherever possible. The diet should be non-irritating, preferably vegetables. Many drugs have been recommended but not one is infallable. Formerly, iron, quinine, atropine, ergotin and arsenic were popular. Kocher prescribes sodium phosphate 2 to 10 Gm. daily, while Ebstein mainly treats the coprostasis. The cardiac disturbances are not benefited by digitalis unless some myocarditis is present. Very good results have been seen by the author from the use of antithyroidin (0.5 to 2.0) and rodageu (5.0 to 20.0), while preparations of other ductless glands, as the thymus and hypophysis, are generally ineffectual. Thyroid preparations are distinctly contraindicated, as they will usually aggravate the condition. A large percentage of patients are benefited by rest and forced feeding alone. The surgical treatment is discussed by P. Sudeck, who states that the mortality has now been reduced to 1½ to 5 per cent., while probably 75 per cent. or more of the patients are absolutely cured. The figures will be still more favorable if the cases come to operation sooner. When there is marked tachycardia and cachexia, the patients should be treated internally for some time, as the greatest post-operative danger is failure of the heart. This danger is also present if local anesthesia is employed, but more favorable conditions can be created by first giving veronal or a subcutaneous injection of pantopon.—Muench. med. Woch.

Bismuth Poisoning in Surgical Practice.

Beck (Central. f. Chirurgie) directs attention to the fact that in the course of the last twelve months many instances have been recorded of serious and, occasionally, of fatal results from the use of bismuth paste in the local treatment of suppurating cavities and fistulæ. Reich, of Tubingen, has collected 16 cases with 7 deaths, and of 3 cases recently put on record by Matsuoka 2 were fatal. The earliest symptom of the chronic form of poisoning caused by the slow and prolonged absorption of bismuth by a suppurating surface is a pale livid tint of the skin. This is followed by an eruption of small, bluish ulcers on the gums. The further progress of the poisoning is marked by nausea, headache, vomiting, and albuminuria. In advanced cases the ulceration of the gums increases, and the patient becomes emaciated, and gradually succumbs.

The author, who in his own practice observed cases of the kind, states that the bad results of the slow absorption of bismuth may be prevented by constantly looking out for the appearance of the early signs of the poisoning, and if any of these be manifested, by injecting into the cavity still occupied by the bismuth paste some warm and sterilized olive oil, which is allowed to remain from twelve to twenty four hours, and until it has formed an emulsion which can be removed by aspiration.

The use of bismuth paste is contraindicated in cases of acute suppuration, particularly empyema, as absorption so readily occurs on the fresh inner surface of the suppuration. On the other hand, in old abscess cavities with thick and fibrous walls with much diminished capacity for absorption, the paste may be applied with but slight risk. The maximum strength of the paste used by the author is 33 per cent. When the secretion becomes sterile, the paste containing this proportion of bismuth is withdrawn, and replaced either by a 10 per cent. paste or by sterilized vaselin.—British Medical Journal.

Self-Performed Operation for Hernia.

Tzucou describes an operation for hernia performed by him on himself under rachistrychno stovainization (previously reported in La Presse Med., of February 11.). His conclusions were as follows: (1) The pain caused by the lumbar puncture is greater than that produced by a subcutaneous injection, but it is decidedly less disagreeable than the sensations experienced by many patients at the beginning of chloroform anesthesia. (2) In his case the anesthesia was ushered in by agreeable sensations and passed off unconsciously. (3) The slight excitement at the beginning of the anesthesia and the vertigo which he felt on quick movement prove that the anesthesia was diffused in the direction of the cerebral hemispheres. His intellectual faculties remoined perfectly intact and his consciousness was unaffected, the evident proof of this being his performance to completion of a delicate operation. (4) The technique of the anesthetization and the position of the patient after the injection are the essential factors on which depend the degree and intensity of the anesthesia. (5) The anesthesia has a tendency to remain segmentary. In his case all the body above the level of the anterior superior spinous processes of the ilium remained free, the movements of the hands being unaffected. (6) He proved the efficiency of the anesthesia by being able to operate upon himself and to cut into his own flesh as if it had belonged to some one else. (7) The harmlessness of the method is proved by the fact that during the whole time, with the exception of the occasional vertigo caused by brusque movements, not one disagreeable sensation was experienced, in spite of the circumstance that operating upon himself, he was obliged to maintain the sitting posture, and to reach for instruments, wash his hands, etc. (8) The upright posture and the movements executed caused no unpleasantness during the operation, but produced some secondary post-operative effects. (9) Rest during the anesthesia and afterward for at least four days is necessitated by the principle of general pathology that "rest is the best antiphlogistic," for the secondary accidents are due to irritation of the meninges by the substances injected and the consequent variations in the cerebrospinal fluid, all of which are prevented by rest in the horizontal position. (10) A purgative ought to be taken before spinal anesthesia to prevent absorption of intestinal toxins in the event of post-operative paresis. (11) A means of anesthesia sufficiently efficacious and sufficiently innocuous to allow a surgeon to operate on himself for hernia, with success and without any unpleasant consequences, may be modified and improved, but will certainly not be abandoned until human imagination has found a still more wonderful method.—La Tribune Medicale.

The Administration of Chloroform in the Upright Position.

The opinion has long been held, not only by general medical practitioners but also by professional anæsthetists, that it is not altogether a safe procedure to administer chloroform with the patient sitting upright. That this view would appear to be the correct one seems to have gained a certain amount of support from the fact that fatalities have several times been reported as occurring after such administration, usually in dental cases. In a paper recently read before the Harveian Society by Mr. John H. Chaldecott, which we publish in another column, a plea is made for a reconsideration of the whole matter, and if the arguments contained therein are carefully followed, we think that most will agree that the author has succeeded in establishing his points. At any rate, he has had no fatalities, nor has he witnessed the occurrence of any dangerous symptom in a series of 1,400 administrations. As to the relative safety nf the upright as compared with the recumbent position, Dr. Chaldecott has no hesitation in preferring it for nose and throat operations, while it is certainly more convenient for the surgeon. One rather remarkable feature of the cases, which has not yet been explained, is that vomiting rarely occurs, or is only slight, and the general after-effects are much less when this method is adopted. It is essential in this, as in other modes of administering anæsthetics, that the anæsthetist should thoroughly understand the technique and that he should be prepared to act as an assistant if required. There appear to be no contra-indications to the upright posture, nor is there any special type of patient for whom the method is unsuitable.—Medical Press and Circular, London.

Relationship of Tuberculosis to Accident and Injury.

Bosanquet states that this subject has acquired considerable importance within recent years in view of the enactment of employers' liability and workmen's compensation laws. The important facts to be considered in this connection are the possibility (1) that an accident or other injury may be the means by which tubercle bacilli are introduced into a person; or (2) that the injury may cause a weakening of natural resistance to the bacillus and thus permit it to establish itself when it would not otherwise have done so, or may lead to dissemination of the bacilli, thus giving rise either to a new focus of tuberculosis or to exten, sion of one already existing. There are certain peculiarities about the tubercle bacillus which render tbe problem of the relatianship between an injury and a subsequent tuberculous infection specially difficult to determine. In the first place the microorganism is fairly ubiquitous. Secondly, the tubercle bacillus is a slowly growing organism in the majority of instances, so that symptoms of disease do not arise until some considerable period of time has clapsed after its actual introduction into the body or its establishment in some new focus. Accidental injury may cause a direct infection with tubercle bacilli, as in the case of the nurse who cut herself with a fragment of a broken spittoon which had contained tuberculous sputum. Butchers are liable to inoculation from cutting up infected cattle. The condition known as "anatomical tubercle" is a form of slowly developing verrucose tuberculosis of the skin which at one time was not uncommonly found among pathologists. It may be alleged that injury may cause the extension of an existing tuberculosis owing to a weakened resistance or to the dissemination of bacilli. Tuberculous disease of the joints should be considered in a class by itself. There is a considerable mass of evidence that in some way or other injury does lead to tuberculous arthritis; and if the occurrence of the accident is clearly established and it is followed at a reasonable interval by the tuberculosis one may accept the causal connection as probable. As to what constitutes a reasonable period of time opinions may differ, but it seems unlikely that symptoms would be delayed for more than three modths. Also one must look for some sign that recovery has never been perfect—some persistence of pain or stiffness in the joint in the interval. Cases have been reported of pulmonary tuberculosis resulting from severe traumatism to the thorax, but in these cases there was probably a latent tuberculosis before the accident which served to quicken into aotivity the disease process. If the onset of a case of pulmonary disease were attributed to au injury one would be obliged to regard the assumption with grave doubt, since the sequence is undoubtedly rare and its very existence may be doubted. It is well established that injury may cause aggravation of an existing tuberculosis. It is only when the injury affects the tuberculous part directly that one can admit without scruple that subsequent increase of the disaase is due to it. Before it could be admitted that an accident had aggravated an existing focus of tuberculosis situated at a distance from the part affected by the injury it would in any case be necessary to show that it was of such gravity as to produce a clear deterioration of general health.—The Lancet, London.

Obstetrical Anatomy of Double Congenital Luxation of the Hip Joints with Reference to the Pelvis.

J. Dalmas has made a study of the pelvis of women who suffer from double congenital luxation of the hip. He concludes that the pelvis in these cases is not a contracted one, the only contraction being found in the large pelvis, due to drawing together of the wings of the os innominatum. The superior and inferior straits and the cavity are all generally increased. They are found decreased only in cases in which there is a general atrophy of the entire pelvis. The pelvis is markedly anteverted and there is a marked lordosis of the spine.—L'Obstetrique.

Inversion of the Radial Reflex.

At a meeting of the Societe Medicale de-Hospitaux, Dr. Babinski reported an alterat tion in the radial reflex which he has me- with in a particular class of patients sufl fering from lesions of the cervical spinar cord. Normally, percussion lof the inferior end of the radius brings about a simple flexion of the inferior end of the radius brings about a simple flexion of the forearm on the arm. When the tendon-reflexes of the upper extremity are well marked, other movements, especially that of flexion off the fingers, may accompany flexion of the forearm. This is generally the case in patients suffering from hemiplegia of cerebral origin. In the healthy individual, however, the fingers alone are never seen to flex as the result of a radial shock. But this sort of transposition of the normal reflex movement, which the author proposes to call "inversion of the radial reflex," occurs sometimes in certain pathological circumstances. He has met with it in patients suffering from lesions of the cervical spinal cord, including syringomyelia and tumors. and up to the present has never noticed it in affections situated elsewhere' He believes that this inversion of a radial reflex is the result of a lesion affecting primarily the fifth cervical segment. From his observations he concludes that this sign by itself is sufficient to prove that it may help in the localisation of the injury,— The Hospital, London.

Absorption From Muscles.

Meltzer has found that drugs injected into muscles are absorbed almost as rapidly as when injected directly into the veins. Thus epinephrin will cause an almost immediate and pronounced rise in blood-pressure when injected into the muscles, while after subcutaneous use there is hardly any reaction. The rule applies to both colloidal and crystalloidal solutions. Careful experiments showed that the rapid absorption was not due to the fact that the needle entered a vein. Absorption is very much better from the lumbar muscles than from the glutei, since the former consist of finger muscle bundles with less connective tissue, while with the latter the fluid only too readily enters the loose areolar connective tissue with which these muscles are abundantly supplied.

The author recommends that salvarsan be preferably given by injection into the lumbar muscles. He favors small doses given repeatedly.preferably in acid solution.

It is not likely that necrosis of muscular tissue is of common occurrence, but if it occurs, the lesion will probably heal rapidly.—Berl. Klin. Woch.

Enlarged Tonsils and Crime.

The latest theory, which hails from Washington, is that enlarged tonsils are a frequent cause of juvenile crime. The opinion of so distinguished a criminologist as Judge DeLacy upon this subject is stated to be backed up by many leading members of the medical profession in Washington, one of whom, Dr, C. R. Dufour, of Georgetown University Hospital, is said to have examined a large number of mentally backward and incorrigible children and to have discovered in them the existence of enlarged tonsils and adenoids. Some of these were taken and the morbid growths were removed, after which considerable improvement began to show itself in their character and conduct. Any source of reflex irritation present in a child of neurotic or ill-balanced temperament cannot but react unfavorably upon its mental life, so that its removal might be expected to have a good influence in preventing the development of undesirably traits.—Medical Press, London.

Apoplexy and Insurance

Prochazka says that the real cause of an apoplectic stroke is either a disease of the arteries, resulting in a cerebral hemorrhage or a disease of a disease of the heart, resulting in a cerebral emolism. In either case some accident may be the exciting, cause or at least play a significant role in the occurrence. In cerebral hemorrhage the breaking of the weakened vessel may be caused by undue exertion, by abrupt change in temperature of the body, by the rise of blood pressure following fright. Of course, concussion of the skull and brain may have a similar effect. Cerebral embolism may follow injury involving the thorox, any psychic excitement or physical strain leading to overactivity of the heart, etc. Any of these occurrences may be looked upon as determining the onset of an apoplectic stroke, and, therefore, they must be considered in all claims for indemnity by persons insured against injuries and accidents.—Medizinische Blatter.

Ether and Electricity.

"Give me matter and motion," said Rene Descartes in the earlier half of the seventeenth century, "and I will construct the universe." Descartes regarded the world as an immense machine operating by the motion and pressure of matter. He rejected all forms of action at a distance and assumed that force cannot be communicated except by actual pressure or Impact. According to the Cartesian view, the vehicle of light was a closely packed assemblage of globules able to transmit pressure, and the effect of the pressure was light. In regard to colors they were connected with different rotatory velocities of the globules, the particles which rotate most rapidly giving the sensation of red, the slower ones of yellow, and the slowest of green and blue —the order of the colors being taken from the rainbow. The Cartesian system has broken down, but we may be grateful for the stimulus it gave to the spirit of research and for the fresh school of thought which it founded. Hooke with his ether-vibration theory followed Descartes, and then came the great philosopher Newton, who objected to the theory on what were then reasonable grounds, but what enormous developments have arisen out of the theory of waves later improved and extended by Christian Huygens! "Until the seventeenth century," writes the Royal Astronomer of Ireland, Professor E. T. Whittaker, F.R.S., "the only influence which was known to be capable of passing from star to star was that of light. Newton added to this the force of gravity; and it is now recognized that the power of communicating across vacuous regions is possessed also by the electric and magnetic attractions. It is thus erroneous," he proceeds, "to regard the heavenly bodies as isolated in vacant space; around and between them is an incessant conveyance and transformation of energy. The ether is the solitary tenant of the universe save for that infinitesimal fraction of space which is occupied by ordinary matter." The theory goes further and bids us know that ether is as essential to us as the air we breathe, and without the ether we die. When we remember that we on this earth are dependent from minute to minute upon what we are getting from the sun, and that the gifts of the sun are handed on to us by the ether, all scepticism on the point of the necessity of its existence, whatever in fact it may ultimately prove to be, must disappear. What an enormous traffic of energy passes through the ethereal streets is seen from the calculation that the heat received by the earth under a high sun on a clear day is equivalent to 7000 horse power per acre. Of electricity Priestley in 1766 asked: Is there any electric fluid sui generis at all, distinct from the ether? And Maxwell, having demonstrated that the propagation of electric disturbance resembles that of light, replied 100 years later, "We can scarcely avoid the inference that light consists in the transverse undulations of the same medium which is the cause of electric and magnetic phenomena." The development of the subject has proceeded apace, and radio activity and the theory of electrons have now to be connected with the mysterious ether. "The hypothesis of atomic electric changes," writes Professor Whittaker, "has been, to all appearances, decisively established, but all parts of the theory of electrons," he adds, "do not enjoy an equal degree of security, and in particular it is possible that the future may bring important changes in the conception of the ether." The great Newton's view in regard to the improbability of reaching finality in scientific research is thus again endorsed, but progress is worth recording. —The London Medical Lancet.

Vaccinotherapy by irradiated Vaccines.—Renaud (La Presse Medicale) presents a biological study of typhoid vaccine. His vaccines are prepared from cultures of the bacillus of Eberth isolated from the blood of a typhoid patient whose disease was demonstrated at autopsy to be typhoid. Its virulence is such as to kill animals in twenty hours after injection of 7 to 8 milligrams. Forty-hour cultures on glucose are emulsified in physiological salt solution; the emulsion is thus exposed

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and other respiratory affections so often owe their intractability to malnutrition and debility that vigorous tonic medication always forms one of the first and most important indications for their treatment. The results that uniformly follow the use of

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to the irradiation of a quartz lamp for 30 minutes. After this treatment the bacilli have entirely lost their virulence; they are incapable of reproduction and cultures remain sterile. They lose their motility, but undergo no other changes in form. This vaccine may be employed without fear or precautions. It is very easily absorbed when injected under the skin. The local reaction is slight and appears after a few hours. The author compares the effects of inoculation of this vaccine and of virus. The injection of vaccine causes but a short reaction; with an equal dose of virus the reactive period is the same. With both there is a primary period of excitation analogous to that of infections of acute beginning, and this excitation arouses the protective mechanism of the body. The author believes that the microbic products, pure and unmodified, are less toxic than has been supposed, which accounts for the larger doses possible. These irradiated vaccines cause an extremely sudden and brief reaction which never causes grave symptoms and they are eliminated rapidly and completely. Such inoculation presents no dangers, and no risks are incurred. Death is never caused by the intoxication. It causes an immunity and the appearance in the blood of antibodies; large doses may be used to obtain immunization. Each new injection increased the bactericidal properties of the blood. More than 40 typhoid patients were inoculated.

Aneurism of the Third Part of the Left Subclavian Artery.

Pringle (Edinburgh Medical Journal) describes a case treated by aneurismorrhaphy. A cervical rib which was present was first removed. This gave fairly free access to the aneurism, but it was not possible to reach its lower limit, which extended beneath the clavicle. The latter was therefore divided about its middle, and after the subclavius muscle was cut through the outer half of the clavicle was pulled outwards and the aneurism completely exposed. It was now found to be a fusiform aneurism that was becoming sacculated at its proximal part, which was placed rather internal to the outer border of the scalenus anticus. The suprascapular artery was preserved uninjured. The upper cord of the brachial plexus and the suprascapular nerve were very closely adherent to the posterior aspect of the sac, and were dissected off for a short distance to permit of a clamp being applied to the artery proximal to the sac. A strong silk ligature was placed round the artery distal to the sac, but not tied in the hope that by traction upon the ligature the artery could be compressed sufficiently to prevent any reflex hemorrhage occurring. The sac was then opened from end to end. Its wall was very thin, and it contained practically no clot. The ligature as a traction thread had no effect on the rather free hæmorrhage from the distal opening of the artery, and another clamp had to be applied to the vessel distal to the aneurism. The sac was then sutured up with several layers of sutures of fine silk in a fine bowel needle. When these sutures were completed and the clamps removed there was no bleeding at all. The clavicle was wired and the skin-wound sutured. The patient made an excellent recovery. The advantages claimed for the obliterative closure of an aneurismal sac are: (1) That hæmostasis is perfectly secured; as the actual orifices of the main vessel and of any branches that may arise from the sac itself are closed at the sac; (2) that the collateral circulation will suffer less in consequence of the sac being completely emptied, and therefore the pressure that, in its distended state, was exerted upon (a) the collateral arteries and (b) the veins is lessened; (3) that the perisaccular structures are subjected to the least possible amount of traumatism. In spite of the very great improvement in the results of the older methods of treatment which certain statistics show, the method of obliterative endo-aneurismorrhaphy seems to the writer to hold out a better prospect in these cases. It appears to him that the claims put forward by Matas regarding the lessened interference with the collaterals and the venous circulntion are sound ones; but it would also appear that thts method preserves the vasa vasorum of the arterial coats when they persist, or any vessels that might enter an adventitious sac, so that no dead tissue or a tissue deprived of its vascular supply is left, as must always be the case when any portion of the arterial coats remains strangled by a ligature, whether the sac be excised or not, and that this factor is probably one of extreme importance in diminishing the risks of secondary hæmorrhage. Obliterative aneurismorrhaphy appears to be preferable to Matas' "reconstructive" method of treatment; a priori, one would think that the attenuated wall of a vessel at the site of a fasiform aneurism is not suited to resist the full force of the blood-stream normal to the artery which is the seat of the aneurism, and that a secondary dilatation might be expected, and this has actually happened in several of the cases recorded—4 out of 13. In the case now recorded the reconstructive operation might easily have been carried out, but the walls of the aneurism were so thin that it was felt that it would be courting a failure to attempt it.

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Tuberculosis in Children.

The intracutaneous tuberculin test is considered by the author to present many advantages over other diagnostic tuberculin reactions. It is relatively easy to carry out, the result of the test is readily recognized, and the discomfort to the patient minimal. The amount injected can be accurately gauged. The possibility of injecting different strengths and even a high concentration of tuberculin by this method renders the test available in all cases of tuberculosis. The subcutaneous tuberculin test fails in patients with fever, while the cutaneous reaction fails in cases where the susceptibility of the organism to tuberculin has been reduced through acute infections or cachexia; the intracutaneous method, on the other hand, succeeds in all these cases. It is thus, in many instances, the only procedure to be depended upon. In patients morbidly in dread of tuberculosis, this test, if strong concentrations of tuberculin cause no reaction, will definitely eliminate any possibility of the presence of the disease. The case of a cachectic child with meningitis in which tuberculosis was ruled out by means of this test is cited by the author. He injects one drop of a 1:1000 solution of old tuberculin and, if no reaction follows, increases the strength to 1 per cent., 10 per cent., and even sometimes 100 per cent., some cases finally reacting to the last-named dose?—Engel, Deutsche medizinische Wochenschrift.

Fracture of the Patella.

The following procedure is recommended by the author in this condition: First, a mold is made of the sound knee with poroplastic material, 1½ feet long by 6 inches broad, which is softened in boiling water and then firmly placed on the knee. The mold of the sound knee-cap thus taken is used as a splint for the fractured bone, the fragments being vised in the cap of the splint. A little cotton-wool is placed in the cap; the rest of the splint, extending above and below the knee-joint, is also to be sufficiently padded. Before fixing the splint the fragments are strapped into position by adhesive plaster, longer strips being also placed just above and below the patella and drawn in contrary directions to pull the upper and lower fragments together. Lastly, a plaster of-Paris bandage is placed over all. In three weeks the plaster-of-Paris is taken off. The splint is kept on for two weeks more, passive exercises begun, and a knee-cap used for two months, after which it is discarded.—Maclachlan, British Medical Journal.

Reducing Suceptibility to "Colds".

The annoyance of colds that follow atmospheric changes, even of a mild degree, impress the susceptible individual with the need of improving his bodily vigor so that he will be better able to resist them, and he frequently comes to his medical attendant in search of measures that will accomplish this. Many employ the Cordial of the Extract of Cod Liver Oil Compound (Hagee) for this purpose, owing to its well known power to add strength and resistance to the lining membranes of the respiratory organs, thus enabling them the better to combat microbe attacks. In inflammation of these organs Cord. Ext. Ol. Morrhuae Comp. (Hagee) has power to be of the utmost service, as it has, also, in their prevention.

Mediastinal Causes of Chronic Cough in Children.

French, in the British Medical Journal, believes that chronic enlargement, sometimes associated with tuberculous caseation, of the lymph nodes at the bifurcation of the trachea is a cause in these cases of chronic cough. The bronchial node immediately below the right bronchus is affected far more frequently than is the node on the left side, and the right phrenic nerve is frequently seen to be displaced by the enlarged lymph node in such a way as probably to be much irritated by it and thus lead to attacks of purposeless coughing—that is to say, coughing which does not succeed in bringing up any sputum. In a certain number of cases it is possible to demonstrate the enlargement of this right bronchial node by means of the Roentgen rays. The author suggests that the attacks of coughing which are so troublesome in some heart cases are to be explained by irritation of the phrenic nerves in a similar way, by their being displaced and stretched by the dilated and hypertrophied heart. The importance of realizing that enlarged bronchial lymph nodes may be the cause of persistent coughing in children is that the enlargement is generally tuberculous, and therefore the correct treatment is to adopt the general hygiene best adapted to the relief of a tuberculous infection together with measures calculated to prevent the swallowing of more living tubercle bacilli, an end to be accomplished either by obtaining milk from cows that have been tested satisfactorily with tuberculin, or else by making sure that any tubercle bacilli in the milk have been killed by efficient sterilization, preferably by thorough boiling.

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Dr. T. O. Coppedge, of Kenansville, N. C., has been elected to the position of third assistant physician in the Central State Hospital for the Insane at Raleigh, N. C.

Dr. J. O. Newell, of Louisburg, N. C., will succeed Dr. Coppedge in his practice at Kenansville.

Dr. Henry E. McMurray, of Kathleen, Fla., and Miss Annie Sampson, of Bennettsville, S. C., were married on January 29th.

Dr. McMurray moved from Fairmont, N. C., to Florida a year or two ago. He is a graduate of the North Carolina Medical College, having received his degree from that institution in 1908.

Dr. Baxter S. Moore begs to announce that he is located at 823 Candler Building, Atlanta, Georgia.

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Tetanus after Injections of Quinine.

Rigollet, (La Presse Medicale,) discusses the question of tetanus following hypodermic injections of quinine. In his opinion such a disaster is due to contamination, and not to any inherent fault of the drug. As Vincent has shown, if tetanus bacilli be injected soon after a hypodermic injection of an insoluable quinine salt has been given, the organisms will be found in the greatest abundance, not at the site of their own injection, but at that of the quinine; and probably this fact is due to the influence of the drug in paralysing leucocytosis The authore who reported cases of tetanus following quinine injection claim to have used the most rigid anti-and aseptic precautions, and attribute the disease to latent spores in the patient's organism, which developed as a result of the paralysing action of the drug. Owing to the general use of hypodermic injections in the quartan fever, it is important that some definite decision should be come to with regard to this method of administration. Rigollet, in attempting this, has investigated the original communications, and finds that in nearly every case abscesses were formed at the site of injection, through which the organism of suppuration and of tetanus could have gained admission. He therefore thinks that in all cases faulty technique was the cause of the disaster, an opinion which is strengthened by the fact that no case has been reported for several years in spite of the thousands of injections which are practiced annually. As, however, there is always a danger of an accident happening, he is of opinion that injections should only be given by a physician and with every precaution; the neutral chloride should only be used, as it destroys tetanus spores, and the fluid should be injected into the muscles and not subcutaneously.

Puerperal Psychoses.

Lucien Picque distinguishes among psychoses connected with pregnancy and the puerperal state between febrile states accompanied by delirium, which he considers to be always due to an infection of the uterus of more or less degree of severity, and the afebrile one. The febrile cases should always indicate an evacuation of the uterus and should be treated only in a hospital where surgery is done and not in an asylum. The uterine wound should serve as a line of separation between the psychoses of pregnancy and of the puerperal state. While there must always be a predisposition to mental trouble, still it is the results of infection that make the condition incurable. If the uterus is early excuated one may get a cure but if the condition of infection becomes chronic there shall get changes in the brain cells that will render the condition permanent. In the apyretic forms we generally observe meloncholia; in the febrile forms confusion, hallucinations and maniacal attacks. The apyretic forms should go to an asylum. the febrile to a surgical hospital.—L'Obstetrique.

Stertlized Milk as a Cause of Infantile Scurvy.

Jordan (British Journal Diseases of Children) reports a case of infantile scurvy due to sterilized milk. The case was an eleven months old baby presenting a history of having never been well, was wasting and always crying. It partook of but little food and never went but a few hours without vomiting.

On examination there were found to be no abnormal signs in the chest or abdomen, the spleen, however, being just palpable. There were slight signs of rickets. There was a very marked glossitis migrans, and it was while this was being inspected that an assistant catching sight of the lower gum, exclaimed "Why, it has scurvy as well." It was found that the only teeth cut were the lower central incisors, and that the gum was bluish and spongy about the left of these. In the upper jaw no teeth were erupted, but over the position of the central incisors were to be ssen two large, bluish, spongy masses.

Further inquiry elicited that there had been bleeding from the mouth, and that two weeks earlier orbital ecchymosis had been observed.

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The Main Building Front View.

The attention of the physicians and surgeons is called to the advantages which this institution offers in methods of laboratory diagnoses.

Many physicians through lack of time, technical training or laboratory equipment find it difficult to utilize the many methods of microscopic and clinical examinations so essential to a proper diagnosis.

To the physicians and surgeons of the Carolinas and Virginia, the Charlotte Sanatorium Laboratory offers, at moderate cost, facilities for such examinations. Animal inocculation, chemical, bacteriological and histological examinations will be made as the case requires.

The following directions are suggested for the benefit of those who may forward material for examination.

All specimens should be accompanied by a brief note descriptive of the clinical condition and a special reference to the character of the examination desired. The name and address of the person to whom the report is to be sent should be clearly indicated.

Seventh Street Entrance.

Sputum—should be sent in a clean, wide-mouthed bottle. The ordinary vaseline bottle answers all purposes. The morning sputum is preferable. That expectorated during meal time should not be included.

Blood For Widal Test.—After carefully washing, prick the lobule of the ear or the tip of the finger. The first drop of blood should be wiped away. Two large drops are then placed on a glass slide, one near either end, and allowed to dry without being spread out on the suface of the slide. After they have dried, the

slide is carefully placed in a clean envelope and box, and then mailed to the laboratory.

Second Method.—Collect three or four drops of blood in a capillary tube; then seal tube over gas or other flame and send to the laboratory. (Capillary tubes will be sent upon application to the laboratory.) Blood for malarial parasites differential count. etc., should be sent to the labaratory on glass slides. As thin a smear as possible should be made.

Smears For The Detection of Gonococci.—One drop ofpurulent discharge from the urethra should be placed at one end of a clean slide and a thin smear made overthe surface of the slide.

Clinical Laboratory, Showing Arrangement of Desks, Miscroscopes, Microtomes, Incubator, Centrifuge, Etc

In collecting a specimen from a female patient,care should be taken to obtain the drop of material directly from the seat of the discharge. This should be done with a sterile swab or other instrument. Two smears should always be sent to the laboratory.

Urine.—for bacteriological examination should always be catheterized directly into a bottle that has been rendered sterile by boiling 15-20 minutes. No chloroform or other preservative should be added. When sending a specimen of urine to the laboratory, always mark it with the date, the name of the patient and of the physician for identification, and specify whether a chemical or bacteriological examination, or whether Ehrlich's diazo test for typhoid fever is desired. The quantity should not be less than four ounces.

Clinical Laboratory, Showing Autoclave, Hood, Operating Tables, Etc.

Pathological—material from either operation or autopsy should be wrapped in gauze moistened with salt solution surrounded by oiledpaper or rubber protective. When it is not possible for material to reach the laboratory within twenty-four hours it should be placed in alcohol (80 per cent) or formalin solution (10 per cent.) Small fragments of tissue and thematerial from uterine curettage should be preserved always.

Tumors.—can be sent by mailing in wide mouthed specimen jars. They should rest upon a pad of absorbent cotton, which is placed in thebottom of the jar before

the tumoris dropped in.

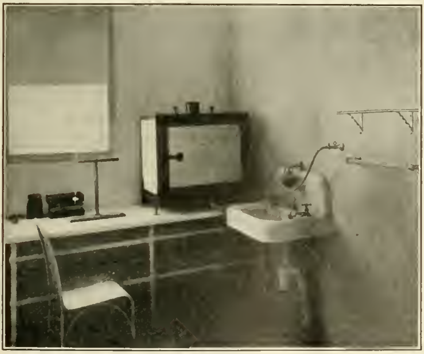
Feces.—should be sent in a clean, wide mouthed bottle. A large sterilized screw capped bottle will answer the purpose.

Wassermann's Test.—Since the advent of the discovery of 606 for the cure of Syphilis. the employment of the Wasserman test, both before and after its use, is conceded by all scientific investigators to be of the highest importance as a control to the curative effect of this remedy. The Charlotte Sanatorium Laboratory is specially equipped for carrying out this Wasserman Sero-diagnosis test for Syphilis.

(Clinical Laboratory, Showing Supplies, Working Table. Etc.)

Specimens sent to the laboratory for this test should be obtained as follows.

1st. By using an ordinary antitoxin syringe, and withdrawing the blood directly from the median basilic vein, as represented in Fig. 1 illustrates tourinquet applied, taken the blood from the vein by means of the syringe



Clinical Laboratory, With Hot Air Sterilizer, Scales, Lavatory, Etc.

2nd. By means of capillary attraction, as illustrated in Fig. 11 represents empty capsule; tourinquet applied to finger. It is best to apply constriction to middle finger, and puncture the dorsal surface of the last joint of this finger rather close to nail with a sterile, and collect blood, as illustrated in Fig. 11.

After obtaining blood if capsule is used, as is shown in Fig. 11, simply place the curved end over a flame of a Bunsen Burner, alcohol lamp, or ordinary gas jet to seal same, and mail. If syringe or other means are employed, put blood in small test tude, allow to coagulate, cork, pack and mail as any other fraigle package. Atleast two C. C. should be withdrawn for this test. The syringe tubes, etc., should be clean and perfectly dry. It is the best, if possible, for patient to go to the laboratory and have the director of that department secure for himself the specimen of blood.

Milk.—The bacteriological examination of milk, requires certain precautions in the collection of the sample. Special instructions and proper containers will be sent upon application.

Stomach Contents.—should be sentin a sterilized bottle. Alarge vaseline or quinine bottle usually answers the purpose.

Fig I.

Fig II.

The following table gives the cost of many of the examinations made in this laboratory:

Smears and Stains (tubercle bacillus,) gonococci, etc.	$1.00
Blood.	
Hemoglobin and Erythrocytes	1.50
Leucocytes	1.00
Differential	1.50
Malarial parasites	1.00
Complete analysis	3.00
Urine.	
Chemical	1.00
Microscopical	1.00
Complete analysis	1.50
Pathological Sections	5 00
Feces Examination	2 00
Blood Culture	5.00
Cultures and isolation of bacteria	5.00
Stomach Contents	2.00
Widal Test	2.50
Tissue Sections	5.00
Tuberculin Test	5.00
Wassermann's Test	10.00
Milk.	
Chemical	2.50
Bacterial	5:00
Water analysis, bacterial examination	5.00
Chemical examination including alkalimity, chlorides, ammonia, nitrites and nitrates	5.00
Quantitative analysis	$10.00 to 25.00
Culture Media (per tube)	.25
Sterilized tubes and pipettes	.15
Coagulation time	2.50
Vaccines	10.00
Sterilized Tubes with swab	.50
Bacterial Cultures	1.00
Sterilized solution	5.00
Spinal Puncture and Analysis	5.00

Address all specimen to the Charlotte Sanatorium Laboratory, Charlotte, N. C.

OFFICERS AND STAFF OF HOSPITAL:

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J. P. MATHERSON, M. D., Sec'y and Treas.

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MEDICINE

Edward C. Register, M. D.,
Chief Physician.

NERVOUS AND MENTAL DISEASES

J. P. Munroe, M. D.,

EYE, EAR, NOSE and THROAT

A. M. Whisnant, M. D. J. P. Matheson, M. D.

DISEASES of DIGESTION

W. O. Nisbet, M. D.

SURGERY

G. W. Pressley, M. D. C. M. Strong, M.D.
A. G. Brenizer, M. D. B. C. Nalle, M. D.

GENITO-URINARY RECTAL DISEASES

A. J. Crowell, M. D.

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Neurotic Anorexia.

While loss of appetite and nausea are usually symptoms of a host of diverse pathological conditions, they sometimes constitute a disease in themselves—a kind of neurosis. In these cases the physician will find Gray's Glycerine Tonic Comp. of almost specific value for restoring the impaired appetite. It is not only agreeable to take, but produces its benefits at once in such a natural way that before the patient realizes it, the normal amount of food is being taken. Its efficacy in these neurotic cases makes Gray's Glycerine Tonic Comp. exceedingly useful in relieving the severe nausea that often occur in early pregnancy.

Winter Colds.

There is nothing that will remove a tendency to colds (nasal catarrhs, bronchitis, laryngitis) more quickly and satisfactorily than a course of treatment with Gray's Glycerine Tonic Comp. Its effect is not only to promote reconstructive metabolism and thus enable the whole body to better withstand disease, but in addition, it imparts a local effect to the respiratory structures that unquestionably increases the local resistance to bacterial invasion. One thing is certain, cases of the ordinary respiratory diseases not infrequently prove intractable to all treatment until Gray's Glycerine Tonic Comp. is administered. Experience has proven this, and there are countless physicians who use this dependable tonic exclusively for clearing up their cases of pharyngitis. laryngitis, bronchitis and allied conditions.

The Ligaments in Health and Disease.

Ducroquet (Rev. d'hyg. et de med. inf.) says that ligaments when relaxed contract, when stretched they lengthen. It is owing to these two main facts that many deformities are produced. The ligaments by themselves are unable to maintain a joint in its normal position. The true ligaments are the tendons and the muscles. When a muscle or group of muscles are paralyzed or in a state of hypotonus, the whole strain is cast on the ligaments, and thus orthopædic conditions are produced. The main idea of treatment of many of these conditions, such as club foot, flat foot, genu valgum, etc., depends on utilizing these functions of ligaments, namely, relaxing the lengthened and stretching the contracted. A warning is given that whilst treating one deformity another may be produced from ignoring these functions, notably in Little's disease and in hip disease. During the applicarion of a plaster the leg is apt to be supported only by the heel,

K&O DOUCHE FOR THE APPLICATION OF GLYCO-THYMOLINE TO THE NASAL CAVITIES

GLYCO=THYMOLINE

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Benzo-Salicyl. Sod. 33-33: Eucalyptol .33; Thymol. 17: Salicylate Methyl. from Betula Lenta .16: Menthol .08 Pini Pmuilionis-16: Glycerine and solvents q. s. 480.

causing the flexors of the knee to be tired out and stretching of the posterior ligament; if a series of plasters be applied in this way, a genu recurvatum is bound to occur.—British Journal Children's Diseases.

New Researches with Reference to Non-gonococcic Ophthalmia, "Ophthalmia by Inclusions."

Morax has inoculated the eyes of monkeys with the discharge from the so-called ophthalmia by inclusions, which is not due to gonococcic germs, and has concluded from his examinations that there is a specific inflammation which causes this form of eye trouble in the newborn. The etiology is not known. This disease may be transmitted from an inflammation of the urethra or utero-vaginal membrane to the eye, and vice versa. It resembles trachoma in that there are granules, or epithelial inclusions, under the mucosa of the eyelids. The prognosis of this form of eye trouble is good, since it disappers spontaneously in a month or six weeks without ulceration or scar formation. No treatment seems to be of value in causing earlier disappearance of the trouble. Out of 119 cases of ophthalmia observed by Lindner, fifty-three were of this type.—Annales de Gynecologie et d'Obstetrique.

The treatment of Cleft Palate.

The features of the discussion on the treatment of cleft palate at the May meeting of the Royal Society of Medicine were the sharp conflict of opinion on the age at which to operate, and the general acceptance of Langenbeck's operation in preference to those devised by Lane and Brophy. Lane stated that he operated as soon after birth as possible— (1) in severe cases to save life, and (2) to obtain sufficient air-pressure in the naso-pharynx during respiration to enable the naso-pharynx and surrounding bones fully to develop as they do in a normal child. He said that only a fraction of the severe cases survived to come to operation at four to six years. The more serious the case, the earlier in life it shoud be operated on. In the first few days of life those babies were at their best. Many clefs could only be closed early, as the encroachment of the teeth on the gums deprived the flap of about two-thirds of its breadth. The mortality of 5 9 per cent. with his "turnover flap" operation was surprisingly small considering the desperate state of many of the children on admission.

The strongest opponents of early operation were Johan Ulrich, of Copenhagan, and James Berry. The former stated he had found it more difficult to obtain healing at the age of two or under, and in future he would prefer to postpone operation till the age of three years. Berry said he considered early operation the very reverse of life saving. If emaciated children with a wide cleft ware properly nursed by mother or nurse, he did not find that many of them died. The period of choice for the operation in the difficult cases was at two years, but there were mauy cases with narrow clefts which could be advantageously operated on even in the first year of life. In his serious of 144, no death had occurred. Several of the speakers pointed to the abscence of statistics showing that the mortality in children with cleft palate not operated on was greater than in ordinary children of the same class.

The chief criticism directed against Lane's "turn-over flap" operation were;—That the operation is dangerous in young infants (Spencer, Drew); that the soft palate tends to become thin and cicatrical, and the power of articulation poor (Ulcrich;) that the palate may be too stiff (Ulrich); that there was much scar tissue, the palate was crooked, and when the children spoke there was a drawing up on one side (Kellock); taat atrophy of the flap occasionally occurred, sometines so extensively that further operation was impossible (Berry). Brophy's operation was condemned for its severity by Ulrich and Berry. Ulrich also said that after Lane's and Brophy's operations the teeth were often almost ruined.

The question of prothesis treatment in wide clefts was discussed by Ulrich. In most of the severe cases operation was followed by poor power of speaking, and in some the palate had required to be again split to apply a prothesis. On the other hand many adults with a wide cleft spoke very well, almost excellently, with a properly fitting prothesis. Out of 56 cases he thought that 10 would have done as well without any operation.

Sixty patients were shown at the meeting, and the consensus of opinion was that the results as regards speech were very disappointing. G. E. Waugh dwelt particularly on this aspect. He said that only one of the patients shown did not betray by his speech that he had been the victim of cleft palate. It did not matter whether the operation was done in infancy or slightly late, or whether the original defect was slight or gavee. Even if the structure and mobility of the palate were perfect, the child might speak as if it had no roof to its mouth and no mobile palate. In all probability there were two lesions to consider—one in the function of the speech centres, and one in the structure of the palate—and

FELLOWS' SYRUP
of
HYPOPHOSPHITES

A uniform result may always be confidently
expected from this faithfully-prepared and
long-tried preparation

Reject < Worthless Substitutes
Preparations "Just as good"

they were associated but not interdependent. Surgeons could claim no more than that operation would allow of breathing through the normal passages, and of swallowing in a fairly normal manner.—Edinbough Medical Journal.

A Fine Line of Sterilized Solutions.

Hermetically sealed glass ampoules containing sterilized solutions of important drugs for hypodermic use have assumed a commanding place in medicine in a comparatively short period of time. Two or three years ago, seeing the tendency in this direction, Parke, Davis & Co. brought out a modest line of something like a half-dozen formulas, notable among them being solutions of Adrenalin, Codrenin, and Cacodylate of Sodium. From this small beginning the line has expanded until now the company announces a total of about twenty distinct formulos. The full list, we understand, is now appearing in display advertisements in the leading medical journals of the country. Physicians who are interested in this advance in hypodermic medication—and every physician ought to be—will do well to search out these advertisements and familiarize themselves with the comprehensive line of solutions therein offered.

Solutions provided by the gaseptic ampoule, it is obvious, have several advantages over those prepared in the ordinary manner. They are ready for immediate use: there is no necessity to wait until water can be sterilized and cooled. Accuracy of dose is ensured, each ampoule containing a definite quantity of medicament. The solutions are aseptic; they are permanent.

Hemorrhagic Manifestations in Mental Disease.

G. Boschi describes an epidemic of hemorrhagic disease which appeared in the Provincial Insane Asylum of Sondrio. The manifestations were similar to those of peliosis, Werlhoff's disease, and scurvy, and were associated in various ways. The author thinks that we are not justified in distinguishing types of disease and denominates them all hemorrhagic disease. The epidemic appeared in the spring, which was very damp and very late that year. About 25 per cent. of the men and 10 per cent. of the women were sick, but none of the attendants. This shows the great importance of predisposition in this kind of hemorrhagic disease, which the author thinks consists in a series of conditions having some relation to the presence of the insane. These patients had some cortical alterations due to their mental alienation. There was a vulnerability of the nervous system consequent upon or accompanying the mental disturbances, making the patient an easy prey to hemorrhagic disease. The author advances the hypothesis of a difficulty of adaptation of the vasomoior centers due to climate and altitude.—La Riforma Medica.

Anaesthesia in Cystoscopy and Bladder Operations.

D. Leonordo de la Pena compares the different methods of producing anæsthesia of the bladder for cystoscopic and operative purposes. After mentioning the various local anæsthetics, beginning with cocaine, and referring to the inconveniences of general anæsthesia by chloroform or ether, he decides in favor of spinal analgesia by the injection of stovain into the subarachnoid space of the lumbar region of the cord. This method, he affirms, has notable advantages over the other mentioned, and he has been able to practice cystoscopy and lithotrities which would have been impossible with any other form of anæsthesia.—British Medical Journal.

Sigmoiditis and Infection of the Internal Genital Organs in the Woman.

Jean Poulain says that the position of the sigmoid free in the small pelvis held in position by its mesentery and coming in contact with the female genital organs allows of the propagation of inflammation from one of these organs to the other. This infection is propagated not by the bloodvessels or lymphatics, but by means of the adhesions produced in the peritoneum. These may be many and close enough to cause a paraintestinal tumor as a point of departure for obstruction. The infections of the sigmoid are primarily caused by constipation and are communicated to the genital organs. If treated early they may be cured, while if left alone they cause irreparable lesions of the genital organs. The germs that cause inflammation to pass from the sigmoid to the adnexa are the colon bacillus primarily, the streptococcus, typhoid bacillus, and ameba of dysentery. The one that most frequently passes from the adnexa is the gonococcus. Besides these are streptococci, staphylococci, and tubercle bacilli. We get suppurative and plastic inflammations, the latter producing adhesions that bind down all of the organs contained in the pelvis. In these cases we should try a long course of irrigations of the intestine with hot water and salt, before we undertake operation.—Journal des Sciences Medicales de Lille.

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Address, Opportunity, care The Charlotte Medical Journal.

Morphine, Cocaine and Alcohol.

Morphine, Cocaine and Alcoholic patients treated along lines suggested by the Opium Congress at Shanghai, China, and tested at Bellievue Hospital By Dr. Lambert, of Cornell University, my-self and others. My nurse (for male patients), is a graduate of Trinity College, North Carolina, and was superintendent of public schools in Mississippi and Louisiana, whom I rescued from the curse of morphine after he had spent $1,700 in fake cures and "sanitariums." Correspondence and referred cases solicited.

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SAL HEPATICA is especially valuable when there is torpidity of the bowels or intestinal sluggisbness arising from organic derangement of the liver and kidneys. It is the best agent for the relief of that form of costiveness that is ushered in by an attack of colic and indigestion, and not only clears away the effete and irritating matter in the alimentary tract but eliminates the semi-inspissated bile that too frequently induces the so-called "bilious" condition; at the same time an abundant secretion of normal bile is assured, thereby demonstrating its value as a liver stimulant and true cholagogue.

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Albumen in Sputum.

Roger draws attention to the diagnostic importance of looking for albumen in the expectoration. The number of examinations is 1,710, some in tuberculous and some in non-tuberculous cases. With very few exceptions albumen is constantly found in tuberculous cases, and its presence may be taken as an index of the activity of the disease; when this is quiescent the albumen disappears. Acute miliary tuberculosis seems to be an exception to the general rule that the more active the disease the greater the albumen, as it may fail entirely in these cases. With regard to non-tuberculous cases, albumen was found in the sputum in 72 (pneumonia, broncho-pneumonia, etc.). In these cases the albumen was usually present abundantly but completely disappeared with the disappearance of the acute disease. In 142 cases of simple bronchitis the test for albumen was negative. Certain fallacies should be avoided, The sputum should be fresh, contain no blood and as far as possible no pharyngeal secretion; it should be collected in a dry recipient, mixed with saline solution and well stirred. A few drops of acetic acid are added to coagulate the mucus and then filtered. A little saline is added and then boiled after filteration.—British Medical Journal.

Hope for the Tuberculous Patient.

When demonstrable lesions of tuberculosis show the steady progress being made by the infection, the physician owes it to his patient as well as to himself, to put at the unfortunate one's command whatever advantages may be open to him. Right living, sleeping in the open and the choice of a proper dietary, coupled with such drug therapy as may be indicated, offer the most hope to the tubercular patient who is not in position to seek another climate and lung specialists. The indications for drugs are met by Cord. Ext. Ol. Morrhuæ Comp. (Hagee), for in it are properties well calculated to soothe the irritated mucosæ, make the cough more bearable and maintain strength and resistance of the hard pressed tissues. Cord. Ext. Ol. Morrhuæ Comp. (Hagee) possesses the added advantage of not disturbing nutritional processes, as do so many agents of its class, rendering them a hindrance instead of an aid.

Dilatation Test for Chronic Appendicitis.

Bastedo calls attention to the usefulness in diagnosis of dilating the colon with air in order to determine the presence or absence of latent or chronic appendicitis. A large experience has shown the test to be reliable, in many instances establishing the diagnosis when other methods of examination had failed. A colon tube, through which air is injected with an atomizer bulb, is passed into the rectum for about 12 in. and pain and tenderness developing at McBurney's spot as the colon descends point to the presence of appendicitis. Before withdrawal of the tube the air must be allowed to escape, otherwise colicky pains may result. In an acute case, or in an undoubtedly chronic case, the test would be contraindicated, but it is found to be of great value when chronic or latent appendicitis is suspected, or in any persistent digestive or abdominal disturbance without a discoverable cause. In cases where appendicitis has been suspected because of tenderness over McBurney's point, but in which the diagnosis has been observed by additional points of tenderness along the colon or on the left side, the dilatation test frequently intensifies the tenderness at McBurney's point, while causing all the other points of tenderness to disappear, thus clearing up the diagnosis. Its application is of use in distinguishing between an inflamed appendix and a right sided ovarian or tubal inflammation. Notes of six cases are recorded illustrating the positive findings of the test, and during the last four years no case occurred in which the test was positive and the operation findings negative.—British Medical Journal.

A Cheaper, Yet Superior, Silver Salt.

Among the disadvantages attaching to some of the newer silver salts, 'has been their cost. In Syrgol, an oxyalbuminate of silver, the profession has a highly effective germicidal agent, especially adapted for use in gonorrhea, and yet one whose cost is small. Syrgol is destructive to gonococci in solutions as weak as one-fourth or one-half of one per cent. It is unirritating and may be prescribed with every assurance that its action will be favorable. Before its introduction to the American profession, Syrgol was subjected to the most searching tests in continental hospitals and clinics. Under its use, urethral discharge promptly moderates, the urine clears up, and complications need scarcely be reckoned with. Taking into consideration its undoubted merit as a gonococcocide and its small cost —since it is active in weak solutions—it may be said of Syrgol that it has no superior for use in gonorrheal disease. It is to be hoped that the American profession will try it out thoroughly.

Syrgol is prepared in the laboratory of the A. G. vorm. B. Siegfried, of Zofingen, Switzerland, and is being introduced into America by Mr. Julius Schmid, Astoria, New York, who will be glad to supply

"while the paramount serviceability of a remedy is its therapeutic value its adaptability is an item of no small import.

This is particularly true in the application of hot moist heat, the generally accepted treatment for inflammatory conditions, where its continued application is so essential for results.

To subject a patient to frequent and unnecessary dressings and exposure, as is the case where poultices, moist packs, etc., are used, not only retards the progress of treatment, but disturbs and annoys the patient and is not in keeping with advanced therapeutics.

The serviceability of antiphlogistine as a therapeutic agent is best attested by the preference accorded it by the medical profession in the treatment of Congested or Inflammatory conditions where hot moist heat is called for.

The adaptability of antiphlogistine indicates it as the best medium for the employment of hot moist heat, as it is easy to apply, holds its heat for hours and thus does not disturb or annoy the patient."

American physicians with a liberal quantity sufficient to test its merit. Syrgol is carried in stock by all wholesale druggists.

The Resorption of Inflammatory Exudates.

The resorption of inflammatory exudates, such as those frequently following acute pleuritis, is accelerated by the administration of Idoneen (Curtis). It will be found that Idoneen (Curtis) for this purpose is more effective than the iodide of potassium, for its contained iodine (three per cent.) by reason of the ease with which it dissociates itself, thus permitting the most powerful of iodine effects, exerts an influence far in excess of what would be expected of this percentage. In practice, Idoneen (Curtis) is from fifteen to thirty times more active in iodine properties than other agents containing a similar percentage of the element. Idoneen (Curtis) will be found to influence all inflammatory exudates, aiding markedly in their resorption.

A sample bottle of Idoneen with literature, may be had by addressing The Idoneen Chemical Co., Cleveland, Ohio.

Sporotrichosis Septicemia and Anemia with Febrile Course.

Antonio describes a form of disease localized in the bones and skin due to sporotrichosis and simulating syphilis or tuberculosis. The disease is due to the growth of the pathogenic fungus sporotrichum, a saprophyte. It causes skin lesions similar to pityriasis and trichopyton. There are three forms: cutaneo-dermic; a form with localized gummata and lymphangitis without ulcerations; and another with lesions that are mucous, muscular, osseous, synovial, etc. Some cases are slow and insidious in their beginning, others rapid and inflammatory. Generally the lesions are indolent, torpid and chronic, accompanied by little pain. In rare cases anemia and cachexia are produced. The prognosis is good except in the mucous or laryngeal forms. The patient seen by the author was a girl who presented a gummatous inflammation affecting bones, muscles, periosteum, articulations, and skin. Treatment with iodides is somewhat unsatisfactory.—Il Policlinico.

Colloidal Nitrogen in the Urine in Cancer.

Maucini, employing Salkowski's method of determining the colloidal nitrogen in the urine, found that when the kidneys are healthy the excretion of colloidal nitrogen is increased by all processes that increase the amount of colloidal nitrogen in the blood and lymph, namely, exudates and transudates, pneumonia, pleurisy, circulatory failure, and inflammatory and suppurative processes. The increase associated with carcinoma is attributed to metabolic changes and to autolysis of the tumor.—Deutsches Archiv fur klinische Medizin.

Experiments on the Pharmacological Effects of Salvarsan.

Ferrannini states that we know much about the therapeutic effects of salvarsan but little about its pharmacology. He has therefore instituted a series of experiments to ascertain its effects on the skin, mucous membranes, subcutaneous and submucous tissues, and endothelium of the vessels. His conclusions are that in the solutions generally used therapeutically it has no effect on the skin, mucosa, and endothelium of the vessels. It manifestly irritates the subcutaneous tissues, which explains the inflammatory process which is intense but generally ends in resolution. In subcutaneous injections the substance remains a long time in contact with the subcutaneous tissues, while when rubbed on the skin, instilled into the eye, or injected into a vein it remains for but a short time in contact with the tissues.—La Riforma Medica.

Pleurisy and Insurance.

Bourgy says that pleurisies, the cause of which can be established, or such as are simply complications occurring in the course of other acute diseases, in a word, nontuberculous pleurisies, are not contraindications to acceptance for insurance, if the following conditions have been fulfilled: The cure is complete, as corroborated by freedom from signs and symptoms for a sufficient period of time. There has remained no sequel of the disease that may embarrass other organs in performing their functions. The same attitude should be adopted in regard to empyema, even though surgical interference has been necessary for effecting a cure. So-called essential or primary pleurisy, on the other hand, must be looked upon from a different point of view. It is usually due to tuberculosis, and the applicant giving a history of such pleurisy must be thoroughly examined with regard to any manifestations of tuberculosis. Personal and family antecedents, age, sex, surroundings at home, profession, habits, date of the pleurisy, etc., are the points which must be fully considered. Whenever there is any doubt it is always a good general rule to recommend postponing the acceptance of the applicant for a fairly long period of time.—Third International Congress of Insurance Physicians.

Because of the characteristic agreeableness, certainty, promptness and uniformity of its action, an uncommon degree of contentment is always associated with the prescribing of

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The superiority of the preparation over extemporaneously prepared cough-allaying agents and its numerous imitations and the manner in which it is made available specifically to the medical practitioner has earned for it the admiration of the best element of the profession.

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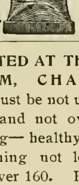

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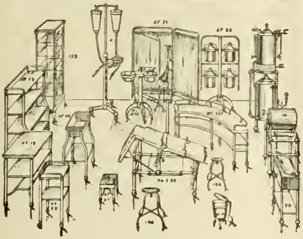

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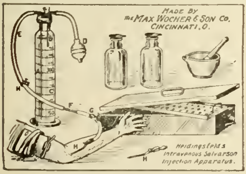
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SPECIAL WESTERN NUMBERS

In furthering the plan of producing special issues of the **American Journal of Surgery** composed of contributions by surgeons residing within a certain geographical area, yet of international reputation there will be issued in the early part of 1912 a **Special Western Number** of this magazine.

Subjects and those to contribute:

The Operation of Gastroenterostomy, by William J. Mayo, Rochester, Minn.

The Surgery of Tendons, by John B. Murphy, Chicago, Ill.

Operative Treatment for Graves Disease, by George W. Crile, Cleveland, Ohio.

Colonic Intoxication, by J. E. Binney, Kansas City, Mo.

Practical Points in the Surgical Treatment of Exopthalmic Goitre, by A. J. Ochsner, Chicago, Ill.

Treatment of Foreign Bodies in the Esophagus, by E. Fletcher Ingals, Chicago, Ill.

Brain Surgery Technique, by J. Rilus Eastman, Indianapolis, Ind.

Treatment of Abscesses and of the Necrotic Foci Resulting from the Use of Salvarsan, by A. Ravolgi, Cincinnati, Ohio.

Treatment of Prostatic Obstruction, by E. O. Smith, Cincinnati, Ohio.

Subject not Announced, by H. Tuholske, St. Louis, Mo.

Artificial Tendons and Ligaments in the Surgical Treatmeut of Paralysis, by Nathaniel Allison, St. Louis, Mo.

Uterine Cancer, by John C. Murphy, St. Louis, Mo.

Arthritis Derformans, Leonard W. Ely, Denver, Colo.

Acute Angulation and Flexure of the Sigmoid as a Causative Factor in Epilepsy with special Reference to Treatment, by W. H. Axtell, Bellingham, Wash.

The character of contributions prepared by these well known surgeons are of such a nature as to make this number particularly interesting.

THE AMERICAN JOURNAL OF SURGERY,
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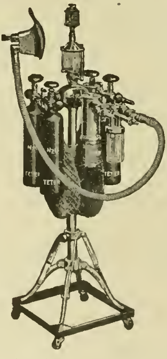

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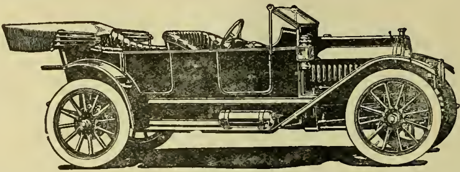

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Treas. S. C. Stanton, M. D., Chicago. Ill.
Next Meeting Detroit, Mich., Sept, 13th-14-15, 1910.

SOUTHERN SURGICAL and GYNECOLOGICAL ASSOCIATION.

Annual Meeting at Washington, D. C., Dec, 19-21, 1911.
W. D. Haggard. M. D., Sec., Nasheville, Tenn.
Rudolph Matas, Prest. New Orleans, La.

SOUTHERN MEDICAL ASSOCIATION.

Annual meeting at Hattiesburg, Miss. Nov .14-15-16, 1911.
Oscar Dowling, M. D., Sec. Shreveport, La.
Isadore Dyer, M. D., Pres.
New Orleans, La.

TRI-STATE MEDICAL ASSOCIATION OF THE CAROLINAS AND VIRGINIA.

Annual Meeting at Columbia, S. C., Feb. 23-24, 1912.
Ralfe E. Hughes, M. D., Sec.,
Laurens, S. C.
J. Howell Way, M. D., Pres.
Waynesville, N. C.

MEDICAL ASSOCIATION OF THE STATE OF ALABAMA.

Annual meeting at Birmingham, Ala.,
April, 19 1912. J. N. Baker, M. D., Sec., 602 S. Perry St., Montgomery, Ala.
L. C. Morris, M. D., Pres.
Birmingham, Ala.

MEDICAL ASSOCIATION OF THE SOUTHWEST.

Annual Meeting at Oklahoma City, Okla. October, 1911.
F. H. Clark, M. D., Sec., El Reno, Texas.
M. L. Perry, M. D. Prest., Parsons, Kans.

FLORIDA MEDICAL ASSOCIATION.

Annual meeting at Tallahassee, Fla., May, 10, 1911.
J. D. Fernandez, M.D., Sec.,
Jacksonville, Fla.
James D. Love, M. D., Pres.,
Jacksonville, Fla.

MEDICAL ASSOCIATION OF GEORGIA.

Annual Meeting at Augusta Ga., April, 17-18-19 1912.
W. C. Lyle, M. D., Sec. Augusta, Ga.
W. L. Felts, M. D., Pres.,
Corrollton, Ga.

KENTUCKY STATE MEDICAL ASSOCIATION

Annual meeting at Paducok Ky., Oct. 1911.
Arthur T. McCormack, M. D., Sec.,
Bowling Green, Ky.
Jas. G. Carpenter, M. D. Prest., Stanford, Ky.

LOUISIANA STATE MEDICAL SOCIETY.

Annual meeting at Shreveport, La.,
May, 30-31, June 1st, 1911.
Joseph D. Martin, M. D., Sec.,
141 Elk Place, New Orleans, La.
E. J. Garner, M. D., Pres.,
1641 First St., New Orleans, La.

MISSISSIPPI STATE MEDICAL ASSOCIATION.

Annual Meeting at Jackson, Miss, April 11, 1912.
E. F. Howard, M. D., Sec.,
Vicksburg, Miss.
D. J. Williams, M. D., Pres.,
Ellisville, Miss.

MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA.

Next Annual Meeting at Hendersonville, N. C. June, 1912.
A. A. Kent, M. D., Pres.
Lenoir, N. C,
D. A. Stanton, M. D., Sec.,
High Point, N. C.

NEW MEXICO MEDICAL SOCIETY.

Annual Meeting at Las Vegas, N. M.,
(date not yet decided.) 1911.
Dr. R. C. Mcbride, D. Las Cruces N. M. Secretary.
F. B. Test, M.D., Prest, E. Las, Vegas, N. M.

SOUTH CAROLINA MEDICAL ASSOCIATION.

Annual meeting at Columbia, S. C., April 20, 1912.
Edward A. Hines, M. D., Sec.,
Seneca, S. C.
J. W. Jervey, M. D., Pres.
Greenville, S. C.

TENNESSEE STATE MEDICAL ASSOCIATION.

Annual Meeting at Nashville, Tenn.,
June 11, 1911.
Geo. H. Price, M. D., Sec.,
146 8th. Ave., Nashville, Tenn.
John A. Witherspoon, M. D., Pres.,
Nasheville, Tenn.

MEDICAL SOCIETY OF VIRGINIA

Annual Meeting at Richmond, Va. Oct. 24-27, 1911.
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O. C. Wright, M. D., Prest.,
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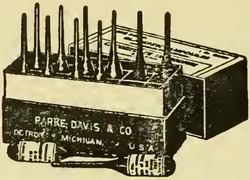

5. **Codrenin, ℞ "C":** Adrenalin Chloride, 0.0001 Gm. (1:10,000); Cocaine Hydrochloride, 0.0025 Gm. (¼ of 1%). 1 Cc. ampoules.

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6. **Eudrenin, ℞ "B":** Adrenalin Chloride, 0.0001 Gm. (1:10,000); Beta Eucaine Hydrochloride, 0.0025 Gm. (¼ of 1%). 1 Cc. ampoules.
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8. **Iron Arsenite,** 0.065 Gm. (1 grain): Iron Arsenite with Ammonium Citrate. 1 Cc. ampoules.

No.

9. **Iron Arsenite and Strychnine:** Iron Arsenite with Ammonium Citrate, 0.065 Gm. (1 grain); Strychnine Nitrate, 0.001 Gm. (1/65 grain). 1 Cc. ampoules.
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13. **Morphine and Atropine, ℞ "B":** Morphine Sulphate, 0.008 Gm. (1/8 grain); Atropine Sulphate, 0.0003 Gm. (1/200 grain). 1 Cc. ampoules.
14. **Morphine and Hyoscine:** Morphine Hydrobromide, 0.01 Gm. (1/6 grain); Hyoscine Hydrobromide, true, 0.0004 Gm. (1/150 grain). 1 Cc. ampoules.
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17. **Quinine and Urea Hydrochloride 1%.** 5 Cc. ampoules.
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21. **Sodium Cacodylate, 2 Grains.** 1 Cc. ampoules.
22. **Sodium Cacodylate, 3 Grains.** 1 Cc. ampoules.
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Charlotte Medical Journal.

A SOUTHERN JOURNAL OF MEDICINE AND SURGERY.

VOLUME 65.
NUMBER 3

Charlotte, N. C., March, 1912.

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Nutrient Wine of Beef Peptone

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It is well recognized that mixed infections are usually present in infectious diseases. **"Mixed" and "polyvalent"** (**many different strains**) **bacterins are therefore becoming deservedly popular.** As regards their use, Polak states:

> "The mixed vaccines of reliable laboratories have given better results than when a singly variety was used. This has been shown repeatedly in the blood Picture when an autogenous vaccine of a single strain used in large doses up to 500,000,000 has failed to increase the leucocyte count or diminish the polynuclear percentage, the mixed vaccines of several strains have promptly produced a marked leucocytosis. Even colon bacillus infections, such as the infection of a pelvic hematocele by the colon bacillus, have yielded more promptly to mixed vaccines of polyvalent strains than when a single autogenous germ has been used. (JOURNAL AMERICAN MEDICAL ASSOCIATION, November 25, 1911, p. 1738.)

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The results following the general use in the U. S. Army of typho-bacterin in protective vaccination against typhoid fever are little short of marvelous. "During the past three years 60,000 men completed the three inoculations: but twelve cases of typhoid fever developed during this time and no death occurred." (Phalen and Callison, MEDICAL RECORD, December 9, 1911, p 1203,)

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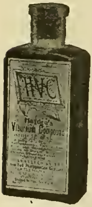

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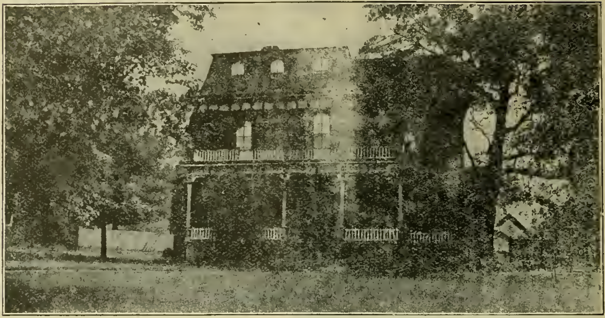

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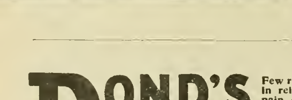

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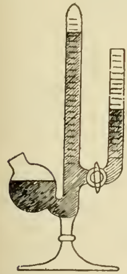

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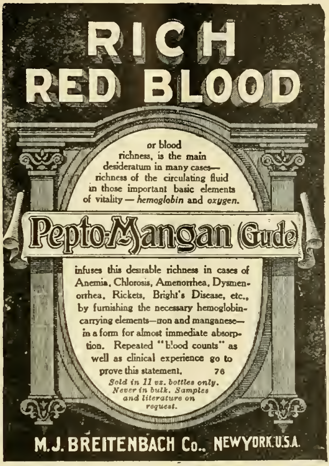

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The Charlotte Medical Journal

Vol. LXV CHARLOTTE, N. C., MARCH, 1912. No. 3

The Evolution of Medicine, with Remarks on the Relations of the General Practitioner Thereto.*

By J. Howell Way, M.D., Waynesville, N. C., President North Carolina State Board of Health, Ex-President State Medical Society of North Carolina, Surgeon Southern Railway, Member American Medical Association, Member American Public Health Association, &c.

Gentlemen of the Tri-State Medical Association:

Responding to the pleasing words of introduction, I must again express my sincere appreciation of the honor conferred one year ago at Raleigh, N. C., when your kind partiality named your President for this term. In being thus honored with your choicest gift, I feel that to be President of the Tri-State Medical Association of the Carolinas and Virginia is truly among the proudest distinctions accorded an American physician, for we know, that in no section of the Union are there purer, or quite so pure, strains of the best blood of the British Isles, nor quite so large a proportion of the inhabitants today, direct descendants of the strong and virile stock of the days when the devout Puritan and the courtly Cavalier, in common spirit, began the building of great States where freedom of conscience and liberty of speech and action were the common foundation stones.

In the early colonial days of our States, geographic proximity, a common blood and language, daily confronting the same dangers incident to pioneer life, frequent intermarriages of their sons and daughters, all conspired to unite in closest bonds of friendship the populations of these three States. Shoulder to shoulder in the great armed conflicts since then, and the farther strengthening influences of time and cherished tradition, have but closer welded the bands of unity. And today I but emphasize the voice of our common sentiment of inter-state fraternity, when I state that it is extremely doubtful if there exists anywhere among the splendid galaxy of sovereign States comprising our great American union, any three sister States so intimately connected and so closely bound as are we three —North Carolina, South Carolina, and upper Carolina or Virginia as she is ordinarily called!

Having its Genesis in the hearts and heads of some of the noblest men of our profession, it was in this same warm and kindly spirit of fraternal kinship the Tri-State Medical Association came into being, and I may farther add, it is the cultivation and perpetuation of that spirit that today makes it the strong and useful organization it is, enrolling as we do in our roster the names of the medical gentlemen who unquestionably are actively potent in moulding and directing professional sentiment in their home States, it may be said without fear of contradiction that this association represents the elite of the profession of these States.

I congratulate you on your splendid condition, and as well on your choice of your place of meeting in this delightful city among one of the most cultured peoples of our loved South—a population we love and respect for their many personal attractions and their devoted adherence to the eternal principles of justice and right. I also congratulate you on having again at the helm of affairs the most popular secretary we have ever had, and if you will permit your president to make a suggestion, it is that you retain him in that position and allow him to gracefully and graciously grow old in your service.

In casting about for a theme for this discourse I have decided to briefly direct your attention to some random thoughts on The Evolution of Medicine in its Relation to the Work of the General Practitioner.

The art of medicine is almost as old as the birth of the race itself, and the history of the evolution of the art of medicine into the science of medicine is a most fascinating study. With the earliest cries of new born humanity there came alike with joys to bless and hopes to uplift and buoy, disease and death to disintegrate and destroy, and it has ever been the study of mankind to find alleviation and cures for disease and means to delay the hand of death.

Surrounded by vigorous and healthy vegetable and animal life in their protean forms, primitive man most naturally directed the currents of his mentality in the direction of seeking measures to palliate his physical and mental woes and to prolong his stay on earth. At an early day when there existed no definite knowledge of the human body or of its many organs and their varied functions, it was to be expected that a belief in the supernatural character of disease would have obtained, and relief as logically sought in sacrificial offerings and prayer to their Gods. Hence we see how the leaders of religious thought became the mediums through which assistance in sickness was expected to come. It is of more than passing interest to note the continuation of the most primitive conception of the nature and cure of disease has perpetuated itself through the passing ages, and there has been no great civilization on earth that has not had a system of healing based on a divine origin.

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*The President's Annual Address 14th annual session Tri-State Medical Association of the Carolinas and Virginia, Columbia, S. C., February 21-22, 1912.

Of the medical systems of the ancient days, the knowledge of which has been handed down to us, there has been none that for the "beauty of conception and the grandeur of detail in the execution of, all are as nothing in comparison with the cult of the son of Apollo, of Aesculapius, the God of healing. To him were raised superstructures which were filled with the most sublime products of Grecian art and which were at once temples of religion and sanitaria for the healing of human disease."

With the evolution of the human mind, it was inevitable that disease should be studied from the standpoint of cause and effect, but the subtle influences of well-fixed superstition, prejudice of long continued mental habit, and the self-interested vanity of a satisfied priest-craft, coupled with a profound degree of veneration for the mortal remains of the dead, all conspired to render the opportunities for intelligent investigation of human pathology very few indeed, consequently the advance of medical knowledge was tediously and painfully slow.

Recent Babylonish studies, however, clearly indicate that in the time of Khammurabi, who it is believed was a contemporary of Abraham some 20 centuries B. C., there existed a more intelligent conception of disease than we have been accustomed to credit the ancients with possessing, and surgical operations of some magnitude were performed, notably operative proceedures for the relief of ocular cataracts and vesical calculi, these two items being specially mentioned in the legal schedule of professional fees as laid down for physician's charges in the now celebrated Khammurabic code. In addition human skulls found in various parts of the world give ample evidence of intelligent trephining operations in the earlier ages of man's existence. Not only these evidences, but a critical perusal of the Mosaic code evidences an appreciation of sanitary principles that appear to have been lost at a later period of the world's history.

Hippocrates, who lived four centuries B. C., was undoubtedly the most observing student of medicine of the ancients, and his observations and writings justly entitled him to be called "the father of medicine." The absence at this time of even the most meagre knowledge of the actual anatomical and physiological conditions of the human body naturally made all theories of medicine most speculative in character, and Hippocrates' ideas of medicine were evidently influencee by the current philosophy of the educated men of his time. Thus in nature there were believed to be four primal elements—fire, air, earth and water. So in man, Hippocrates taught the existence of four elements—blood, mucus, yellow bile and black bile; the blood representing the heat; the mucus, the cold; the yellow bile, the dryness; and the black bile, the moisture. Hippocrates' suggestions of scientific foundation for medicine seem to have undergone but scant development for the next six centuries, there being in existence at the end of that length of time but little knowledge of human anatomy and the most absurd ideas of physiologic function were entertained. In the second century Claudius Galenus, or Galen as we are accustomed to refer to him, developed the knowledge of human anatomy to a wonderful degree as compared with pre-existent anatomic lore, and also discovered something of physiological processes in the human body. Galen dissected the human structure, and conducted vivisection experiments, laying the original foundation for experimental research work in medicine and surgery, which have, in connection with the intimate revelations of the microscope, after all, been the essentially vital factors in their scientific development. With the passing of Galen, whose researches were considered so conclusive that scant or few efforts were made on these lines to add to the demonstration of human knowledge, a period of almost fourteen centuries of rest ensued.

In the sixteenth and seventeenth centuries investigation was again resumed, the circulation of the blood discovered and also some slight knowledge of nerve action obtained. Why Galen failed to discover the circulation of the blood has always been a puzzling thought to me. His description of the principal arteries of the human body is very good, but of course finding them empty *post mortem*, he persisted in his belief that they were merely air tubes, and the profession slept in similar ignorance for fourteen hundred years until William Harvey demonstrated their true functions as blood carriers. With the discovery of the circulation of the blood, diseases began to be studied more systematically, and new methods of investigating disease were discovered, and with the advent of more definite knowledge of pathological processes, began the disappearance of superstition in medicine and its practice. The practice of surgery was delegated to the barbers and bone-setters, consisting chiefly as it did, of dressing wounds, setting bones, and a very few operations performed under the directions of the physicians. Nevertheless, I am convinced there must have been in existence a much more skillful practice of surgery in the days of the greatness of the Babylonish Empire, more than 20 centuries B. C., than was practiced in enlightened Europe thirty-five hundred years later. As is well known the society of barbers and surgeons was incorporated by Edward IV in England in 1461, and it was nearly three hundred years later that barbers and surgeons became separate professions in both England and France.

During the 18th century interest in medical as well as in all other scientific investigation increased, the world itself was waking up, and decided advances were made in methods of diagnosis, auscultation and percussion became accepted methods of recognizing certain changes in the tissues of the human body, patients became to be studied more carefully with reference to the critical analysis of their symptoms as related to diseases, still in regard to disease in general, many most primitive theories remained, as I must confess with a degree of reluctance for the intelligence of my race, they do with many otherwise educated and intelligent people today. John Wesley, the great founder of Methodism, who died in 1793, was a student of medicine as well as of almost all other branches of human knowledge known to his generation, and a remedy which he extols most highly in his writings as of peculiar efficacy in a variety of pathologic states is prepared by incinerating live toads in a hot skillet over burning coals. *En passant*, I had a very delightful old lady for a patient for some years who at the age of 70, and possessed of far more than the average of intelligence, described to me minutely her method of making "toad ointment," evidently based on the great Wesley's prescription, and which she was just as assured as was he of its great therapeutic values.

Inflammatory affections of the kidneys were described by Bright. The general manifestations of tuberculosis and typhoid fevers were also recognized and understood, the blood changes were beginning to be appreciated in their relation to disease, vaccination was discovered, and its beneficent influences recognized, but it remained for the practical application of the microscope to revolutionize and forever dethrone the existent medical theories, and to erect a new system of theory and of practice. It also ushered into existence a hitherto unknown field of surgical activity and possibility that today knows practically no restrictive line other than the question, Does the patient still live? And if so, he may find salvation, if it is a surgical case!

Pasteur's great work, beginning about the middle of the last century, in the discovery of micro-organism, and their demonstrated relationship to diseases of fermentation and suppuration in organic tissue, laid deep and well the foundations of bacteriology on which we build the new pathology, and from which we are yearly evolving more perfect knowledge of disease processes and better methods of therapy. Pausing a moment to survey the splendidly worked field of modern scientific medicine as it appears to us today, we can but wonder and amaze at the slowness with which progression has been made, and ask we ourselves why a disease like tuberculosis, which was from the clinical history viewpoint, well described 25 centuries in the past, should have remained an undiscovered mystery until Robert Koch, only a score and a half years ago, pointed it out and made the demonstration so clear that none may question its correctness. It was not the fault of the clinicians of the olden time, for I sometimes, when reading their clinical histories, with their careful study of temperamental and diathetical influences, wonder if we really do consider as carefully as they did the many petty things influencing the possible course of disease. But it was the character of the means they laid for demonstration of cause and effect. When the microscope was brought to the degree of perfection where it became available to study disease aetiology and pathology, then laboratory equipment and laboratories came into speedy existence, and it became possible to search in a material way for an actual disease entity, and with a definite knowledge of the more intimate nature of things pathological, mysteries that had for centuries lain enshrouded in the veil of superstition of the past ages, were made known. Vaccination as a preventive of small-pox was discovered near the end of the last century, and practiced with complete success for a hundred years almost, before the correct principle of the vaccines and sera were fully understood. With this relatively recent demonstration, a new field of therapeutic endeavor is being opened up from which we workers in the field of general practice logically anticipate great acquisitions to the medical armamentaria therapeutica. This field of scientific endeavor has been opened only through the avenue of vivisection experimentation, a fact of such important practical benefit to the human race that its value should ever be kept before the profession and laity as well, that no silly faddism or sickly sentimentalism shall destroy or impair the pregnant possibilities of future scientific investigations by the enacting of hindering or prohibitive legislation.

With every added fact to the sum total of human knowledge, whether it be an improved diagnostic method; or a better therapeutic proceedure, the responsibilities of the general practitioner is increased by just that much. It is impracticable for a single human mind to encompass the detailed accomplishment of the entire domain of medicine and surgery, but it is well within the power of any progressive generalist to keep reasonably well posted along the general lines of advance in pathologic, etiologic, diagnostic, and therapeutic activity. He should, above all else, strive to be able to correctly diagnose his cases, and while he must need to refer from time to time, members of his clientele to medical and surgical specialists, he should make such references with a reasonable idea of what the patient is referred for, and what is expected to be accomplished by the specialists' treatment of the case. No truly self-respecting practitioner will advise a man with pterygium to "see an oculist about that cataract growing over your eye," and while I am very sure that no member of this association ever did such a thing, yet every oculist present will smile as he recalls that legal practitioners of medicine in each of our constituent States have done this very thing.

One of the gravest responsibilities growing out of recent scientific advances, and confronting the general practitioner, is the proper solution of the ever increasing problems of public health. Now I assume that every practitioner of our art is favorably disposed to the constant and continued education of the public at large in regard to all phases of scientific things relating to individual or community health; and we certainly should be, for it is our work that is bringing intelligent and appreciative laymen into a wider and more expansive understanding of health conditions and requirements. Our profession made the discoveries, saw the necessity for public health laws, and cultivated the public health sentiment that has forced sometimes even unwilling legislators to enact measures to promote better health in our communities, and yet I can but find myself wondering sometimes if some of us have really appreciated the full force and the ultimate effect of the tremenduous and constantly increasing power of public sentiment for better health conditions in home, city, county, state and nation, that has been created in the past fifteen years. It is literally a moving tidal wave that is sweeping over the country. It came into being at the behest of the medical men of the country, and its future growth and conduct must in large measure be shaped and moulded by the physicians, and particularly by the general practitioners of medicine. Just exactly how many of the delicate and difficult questions that are being, and are to be, presented, are to be answered correctly, and the various new problems the new order of things creates, accurately solved, remains to be seen, but it is a practical fact, that to a degree, the general public are for once taking us at our word in our oft noted statement to the effect that we are guardians of the public health, and we are now placed in a position where we must go forward and make good our professions of the past. Without the aid of intelligent practitioners of medicine no public health movement is very likely to advance to any great extent of accomplishment, and there are many practical hindrances in the way of the masses of the general practitioners of medicine engaging to an extent beyond merely giving in the range of their clientele proper advice on all questions submitted to their consideration. Many new issues are naturally developing, and it will require time and thought to determine the wiser course to pursue. At this date our honored principles of ethics undoubtedly deter many of us from too zealous an effort to serve the public in health matters in so far as offering our advice without being asked for it. In my judgment, a very few years will bring into existence in every county and municipality the public health officer, whose entire time will be devoted solely to public health work. Such officers of health should properly be nominated by the organized profession of a county or community, for with the seal of professional approval their work would be more efficient. Relieved of competition with their professional brethren, a living income assured, such officials would unconsciously develop most sympathetic and helpful relations with the practitioners of the community, and be in a far better position to accomplish more than is the average health officer today. Inspection of water supplies, examination of school children, and the many things that a competent physician devoting his entire time to public health work in his community, would naturally develop, and those benefitted, the public, would properly compensate for the professional knowledge dispensed.

With the development of the county and municipal health officers into properly paid officials devoting their entire time and energies to the public health work and its varied duties, there would be several thousand medical gentlemen withdrawn from the ranks of practitioners (not a disadvantage by the way!), and there would be a far better opportunity for the utilization of the accumulated wealth of sanitary and hygienic wisdom worked out with infinite labor and painstaking effort by the medical profession in our conflict with disease, to the advantage of humanity. There would then be an open field for the cultivation to its ripest fruition of the scientific beauties of preventive medicine so charmingly portrayed in the classic Presidential Address of my distinguished predecessor, Dr. Joseph A. White, of Richmond, Va.*

Intimately associated with the public health question, and a problem the co-operation of the general practitioner will be needed in satisfactorily adjusting is the matter of community hospitals. To assume that the majority of cases of sickness in common with all operative proceedures, may be better cared for in properly conducted hospitals than in their own homes, is merely to state a pleonasm. Until recently, aside from a limited number of metropolitan hospitals and the various State institutions for the care of the insane, it was the usual custom of society to allow the burden of hospital erection and maintenance to fall upon the more active members of our profession residing in the larger cities who, feeling they could do more work and better work, provided themselves with institutions for the care of their patients. Now while from certain viewpoints, this is very satisfactory, yet I am constrained to believe that the majority of the owners of private hospitals in this country would infinitely prefer to have the burdens of maintenance of such institutions placed where it properly belongs—upon the community at large. Naturally in community institutions delicate questions concerning individual prerogatives of the profession would arise, but the managements should properly be in part controlled by members of the profession who would doubtless care for propositions involving professional rights. As I have elsewhere stated, I believe in less than fifty years from today there will be hospitals built in every commuuity at public expense, and people will wonder at the conditions of civilization that permitted a county or a municipality to erect and equip costly homes (jails and penitentiaries) for the malefactors of a community to reside in, and equally expensive palaces (court houses) in which to hear their cases, while the injured, the sick, and the afflicted were permitted to shift for themselves or be cared for by the charity of some physician having a private hospital. Economic reasons will hasten the growth of this sentiment, and meanwhile it will be fostered by every thoughtful general practitioner who in doing so will be performing a duty to his clientele, his profession and to himself. The organization of strictly medical hospitals was strongly advocated some time since in a very able address by Dr. J. Allison Hodges, a distinguished member of this association. and his suggestion will bear extended and thoughtful consideration by all interested in this phase of our work, it being inevitable that the movement for more hospitals will continue to grow. And it is wise that it should, bringing, as it must needs be, better care for the sick, and improving the conditions under which our professional work is done, thus making for a higher degree of perfection in our work.

Paraphrasing in part the words of another, the spirit of enthusiasm and the restless impulse of applied human energy carved the belvidere Apollo, and it painted the sistine Madonna. It struck fire from cold flint, and it saw in the wreaths of white steam that curled upward from the seething tea-kettle, a greater force than that of all men in the world united. It constructed the mighty works of engineering skill, bridged wide rivers, tunnelled under great cities, pierced the hearts of high mountains, and laid the gleaming steel of civilization on the summits of the Rockies. It took signals under the ocean. It carried messages with undreamed of swiftness through the air. It stored up human speech in reservoirs to be opened and heard again possibly ages after the demise of the speaker; and it harnessed the lightning's potent current to perform at man's bidding. It solved the problem of aerial navigation. It discovered the surgeon's ligature. It introduced vaccination, and with the gentle wooings of anæsthesia robbed surgery of it pristine horrors; and it laid the Christ-like hand of healing on the wounds of humanity through the beneficent blessings of aseptic surgery. We feel its impulse when we read the aphorisms of Hippocrates, in recalling the demonstrations of Isaac Newton and William Harvey, and in recounting the ineff..ble accomplishments of Louis Pasteur, and Reed and Carroll and Leazar. This same spirit was with Alexander in the midnight of battle when he conquered the world, and with Plato in the grove when he founded philosophy; with the great son of Virginia, Washington, when through trials and tribulations he carried the American arms to victory and laid deep the foundations of the greatest country the world has yet seen, and it was later with the glorious

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*Vide Transactions Tri-State Medical Association, 1911—President's Address, by Dr. Joseph A. White, page 96 et seq.

Lee and the immortal Jackson when they led the unconquerable legions of our loved South in defense of their conceptions of the cardinal principles of governmental justice and right. It was close by the lonely camp of Celsus, and it illumined the sightless orbs of Galileo. It inspired Crawford W. Long, of Athens, Ga., when in 1842 he performed the first surgical operation ever done under the benign influence of ether anaesthesia. It was on the battle field with Pare and Larrey as those loyal surgeons followed the legions of Napoleon, and equally it was the guiding star that lit the pathway of the great Southern surgeon, Hunter McGuire, in his ministrations to the sick and the suffering of Stonewall Jackson's corps. It was with the Confederate surgeon, Robert A. Kinlock, of South Carolina, when in 1862, he, for the first time in the known history of surgery, deliberately opened the abdomen and successfully operated for the relief of a gunshot wound of the abdomen—a proceedure so common today we are too prone to fail to remember with honor he who first did it.

We are living today in the most wonderful era in the history of medicine, and it is no exaggeration to say that more has been accomplished within the past seventy years to advance the science of medicine and to relieve human suffering and prolong human life, than was accomplished during the previous forty centuries, and with the present lights illumining our way, we may safely say to waiting humanity that more than ever respects our real accomplishments, that we are just entering upon the era of scientific medicine, the discoveries of which will even yet eclipse those of all the past ages. It is no idle vaporing of the imagination to assume the time can but be near at hand when the infectious diseases will be vanished and known only to the student of medical history, and when affections now little understood will be mastered. We are entering the era when the basic principles of hygiene, diet, sanitation, and precise medication—and I stress the latter for I am one of those who firmly believe there will always be a wide and fertile field for the skillful exhibition of a material therapeutic armamentia—when these things will be so perfectly understood that we will expect to see our clientele, barring deaths from violence, all attain their three score years and ten, or failing we shall attribute it to a deliberate purpose on their part to do so. To accomplish our noble intent the enthusiasm of an ever-increasingly intelligent profession is directed, and our best thought is centered on these problems. The manifold fields of specialism must continue to be cultivated with even more diverting care, and the concentrated wisdom of skilled workers and patient students of nature's mysteries will evolve new truths for the use of the general practitioner whose responsibilities can but grow unceasingly greater as scientific research makes possible his opportunities for service to his race larger. But the general practitioner of medicine, the fairest flower in the garden of our noble profession, will continue to grow in mental and moral stature, measuring fully up to the high, and higher, standards set for him in the future and passing from this mundane sphere and its discomforts to the endless joys of a merited heavenly home it will be truly said of him:

"In love he practiced, and in patience taught,
The sacred art that battles with disease;
Nor stained by single act or thought,
The holy symbol of Hippocrates."

Rupture of the Uterus During Labor.*

By Chas. R. Robins, M.D., Richmond, Va., Professor of Gynecology, Medical College of Virginia; Gynecologist, Memorial Hospital; Surgeon. City Hospital.

In April of last year I was called to see a patient (private records 16-268) who gave the following history:

White, married woman, aged 33 years, 3 para. She had been taken in labor that morning and continued in active labor with severe pains until 5 o'clock in the afternoon at which time the head was reported by the attending physician as presenting at the vulva. Suddenly the pains ceased, the head receded and the patient went into a condition of partial collapse. The attendant called in an obstetrician of considerable experience who made an examination and found the presentation to be face with the chin posterior. He effected delivery with forceps after some difficulty, but when he attempted to extract the afterbirth he found it was outside the uterus and in the abdominal cavity. It was removed without difficulty. As soon as the rupture was discovered I was called and saw the patient at ten o'clock at night. On examination I found the uterus well contracted and empty, and the examining hand went directly through a rent in the right side of the uterus into the abdominal cavity and I could feel the round ligament on that side still attached. While the patient was pale and evidently suffering from shock, her general condition was fair and I advised that she be taken to the hospital for operation, which was performed immediately on her arrival. A median incision was made, the abdomen found filled with blood, some of which was clotted, and floating around in this were flakes of vernex caseosa. Continuous irrigation of the abdomen with salt solution through a Blake's tube was practiced while I was removing the uterus, which only occupied a short time. The abdomen was then cleansed as thoroughly as possible and drained through the lower end of the abdominal wound and through the vagina. There was a good deal of temperature and inflammation following, but the patient finally recovered and was discharged after being in the hospital thirty-seven days.

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*Read before the Columbia meeting of the Tri-State Medical Association February 21-22, 1912.

The report of one case proves nothing but it makes a good text. So far as my experience goes, rupture of the uterus is infrequent in this country and most of the literature we have on this subject comes from Germany where it seems to be a not uncommon occurrence. This is readily explained by the relative frequency and infrequency of pelvic deformity (which is the most frequent causative factor) in Germany and this country. On account of this relative infrequency we are not on the lookout for it and do not carry a clear cut mental picture of the condition or the indications for its treatment. Further confusion is produced when we consult the literature and find that two methods of treatment are advocated, the conservative and the radical, with odds apparently in favor of the conservative method. It is for the purpose of indicating these points that this paper has been prepared.

As to ætiology, Bandl's explanation is generally accepted and is undoubtedly correct. Briefly it is as follows: In labor the uterus divides itself into two portions, the lower dilating and forming a part of the birth canal while the upper is the expelling force. Between the two is a circular ridge of tissue, called Bandl's contraction ring. When a serious obstacle is encountered the upper portion of the uterus is stimulated to more violent contractions and remains retracted, thereby causing an ascent of the contraction ring which may rise as high as the umbilicus. In this way the lower portion becomes more and more thinned out and liable to rupture as a result of the violent contractions of the upper portion. This forms one of the most reliable signs of impending rupture. As to the causes of obstruction we have in the order of their frequency, according to Merk[1]:

Contracted pelvis.
Neglected transverse presentation.
Hydrocephalus.
Large child or unfavorable presentation.
Stenosis of birth canal.
Trauma.
Pelvic tumor.
Ascites.

To these is added a weakening of the uterine wall as a result of previous operation, which is a frequent cause of rupture.

Rupture during labor almost invariably occurs in the lower uterine segment and may be complete or incomplete, in the latter case tearing through the uterine tissue but not through the peritoneum. Ruptures are most frequently complete.

In incomplete rupture the hæmorrhage is not so rapid and we have the formation of a hæmatoma under the broad ligament on one side, separating its folds. The peritoneum may rupture as a result of pressure and cause a secondary hæmorrhage which may be rapidly fatal. In complete rupture the contents usually escape partially or completely into the abdominal cavity.

While the symptoms vary in degree, the clinical picture seems to be a fairly constant one, of which this case presents a very good type. The patient will have been in active labor some hours, the pains becoming more violent, when suddenly at the height of a severe pain the patient has a sensation of something tearing or giving way. The pains immediately cease, there is a flow of blood from the vagina and the patient goes into a state of collapse. The flow of blood from the vagina may be very profuse but is often only slight. The amount of collapse is dependent on the extent of hæmorrhage, and varies from a condition so severe as to produce death in a few hours to one in which the symptoms are only slightly marked. In those cases where the rupture is incomplete the collapse is usually less profound and slower in developing. On examination it will be found that the presenting part has receded or slipped entirely beyond reach while tenderness will be quite marked in the lower uterine segment. Where the fœtus has escaped entirely into the abdominal cavity the firmly contracted uterus can be felt lying to one side of the fœtus.

The diagnosis is confirmed by passing the hand into the vagina when the rent is readily felt, and in complete cases the hand will pass through it into the abdominal cavity and the coils of intestines may be felt. The child almost invariably dies as a result of the accident and without treatment the mother also will die, either from hæmorrhage or from sepsis. When death is due to hæmorrhage it usually occurs in the first few hours, when due to sepsis after several days. Her only hope is from prompt surgical interference.

Two methods of treatment have been advocated, the conservative and the radical. It has been claimed that the conservative method gives the best results. This consisted in delivering the child and after-birth and inserting a drain up through the vagina and rent in the uterus. The fallacy of these statistics is, however, easily apparent, because where this method is used primarily, operation is reserved for those cases in which the child cannot be delivered or where the patient does badly. Where operation is the primary treatment the best results will be secured. In any event the mortality will be high.

Petren has collected 754 cases of which only 238 survived. Of 501 submitted to conservative treatment only 140 recovered, a mortality of 72%. Of 174 treated by laparotomy, 82 recovered, a mortality of 53 per cent. Issel[3] reports nine cases with two deaths, one from peritonitis and one from hæmorrhage. He practiced and advocates prompt abdominal hysterectomy. His experience confirms that of Schutte, Petren and others that these patients bear transportation well. Fothergill[4] reports two cases, both of which recovered following abdominal hysterectomy. He says that it is safer to remove the uterus than to save it and that the uterus is pathologic and frequently ruptures should another pregnancy occur. J. Hartmann[5] advocates total vaginal extirpation because of its comparative safety and excellent results and states that it is a comparatively simple operation. He reports two cases of his own and has collected 27.

We may then, I think, conclude that the following is the best line of treatment: As soon as the rupture is diagnosed, the patient should be immediately rushed to the hospital. The child, as a rule, is already dead and efforts to extract it cause delay and increase the danger to the mother. Experience has shown that these patients bear transportation very well. The operation should consist of abdominal hysterectomy. I do not think that the vaginal operation presents any advantages. If the child should be alive it should be removed immediately on opening the abdomen, incising the uterus if it has not escaped, or enlarging the rent as may be indicated Drainage would appear to be indicated in the majority of cases. I believe that when this treatment is carried out as a routine and without any delay that the frightful mortality that has attended this obstetric accident will be materially lowered and brought within rather satisfactory limits.

1. Obstetrics; by J. Whitridge Williams.
2. G. Petren; Monatschrift fur Geburt und Gyn., March, xxix, No. 3.
3. E. Issel; Monatschrift fur Geburt und Gyn., April, xxi, No. 4.
4. W. W. Fothergill; Journal of Obstetrics and Gyn. of British Empire, October, 1908.
5. J. Hartmann; Zeitschrift fur Geburt und Gyn., lxii, No. 3.

The Retinitis Albuminurica of Pregnancy.*

By E. Reid Russell, M. D., Asheville, N. C.

One hundred years ago Wells wrote concerning the loss of vision in patients suffeing from dropsy, as that found in the pregnant woman. Later Turck pointed out that ambliopia of albuminuria was in some cases due to visible structural alterations in the retina. In a case of albuminuria where one of the clinical symptoms had been loss of vision, he made a post morten, and gave the first histological description of albuminuric retinitis. It was in 1830 that Bright published his observations showins the onset of amaurosis was one of the most striking clinical features. While the retinal affection does rarely occur until there is marked renal disease, the failure of vision resulting from retinitis is often the first symptom for which the patient seeks advice. So it is that many cases are first seen by the ophthalmologist. Uremic blindness may occur in any of the various forms of renal diseases where there is enough interference with excretion by the kidneys to load the blood with those poisonous materials which give rise to the uremic condition. Uremic amaurosis is more often seen in the acute varieties of kidney disease. It is the tubal or parenchymatous nephritis that gives rise to the symptoms seen in pregnancy. Transient blindness is seen at times in uremia without fundus changes, due to a toxic ambliopia and is central in origin. Hypertrophy of the left ventricle of the heart with increased arterial tension, is a condition found in all cases of chronic intersticial nephritis, and in albumiuuria of pregnany we find this more or less. There is no difference in the findings of the anatomy and pathology of albuminuric retinitis of pregnancy from other kidney diseases, with the exception of the blood vessels which are not involved at all, or very slightly so. It is more a lesion of the renal epithelium. In severe cases the entire thickness of the retina is edematous, the edema being more marked at the dark. Often there is edema of the lids on rising in the morning, and it is one of the early symptoms of albuminuria where anasarca may occur. It is the optic nerve and retina that are most important eye manifestations. From a sligt hyperaemia to a well marked "choked disk" may be seen in all forms of this disease. The disk looks blurred, especially at its edges. The arteries may be narrowed or normal in caliber, but the veins are distortuous; Small hemorrhages are seen in the retina as irregular red patches. Small whitish round or oval glistening dots and streaks are seen in the region of the macula. These slowly increase in size until they form a star shaped figure. The white spots and streaks are caused by fatty degeneration of Mullers fibres. The retinal hemorrhages may be absorbed leaving pigmented lines, Other bleedings may occur elsewhere. Retinal hemorrhage means grave lesions in the general circulatory apparatus. In albuminuria of pregnancy these optic nerve and retinal lesions may disappear and usually do, It has been my experience that these exudates and lesions clear up entirely or nearly so. In retinitis albuminuria of pregnancy the vision may be slowly lost, extending over a period of a few months, especially is this true in the primipora, and in the latter part of pregnancy. At times the retinitis may be first seen in childbed. Vision gradually goes in both eyes without contraction of its visual field, and no loss of color-sense. Complete blindness does at times take place, more often in eclamptic seizures, but here, the vision usually returns, unless there are complications, as detached retina, here the vision may be lost. Mild recurrences in later pregnancies are to be expected, with a little more loss of vision.

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*Read by title before the Columbia meeting of the Tri-State Medical Association, Feb, 21-22 1912.

The opthalmoscopic signs are the same as those found in albuminuric retinitis from other causes, and while the picture is very suggestive, similar fundus changes are seen in rare instances of brain tumor, syphilis and diabetes. The condition of the urine, the finding of albumin and tube costs will clear the diagnosis, but it may be that the urine is scanty or absent, and tube casts may be so few as to be overlooked. Silex mantions an early symptom seen with the opthalmoscope in the upright image this is a glistening golden yellow color of the bloodvessels, due to an engorgment in the lymph sheath of the vessels, but this is also seen in syphillis and arteriosclerosis. Retinitis albuminurica is said to occur about once in three thousand pregnancies.

Albuminuric retinitic may appear under the following conditions according to Ball of St. Louis:

First. Ratinitis albuminuria of pregnancy may occur where there there is a fatty degeneration of the epithelium of the uriniferous tubules. Here the urine is scanty and dark in color, loaded with albumin and some hyalin and tube casts, and oftimes granular casts with fatty degeneration of the epithelial cells.

Second. It may occur where an acute nephritis takes place during pregnancy.

Third. Where an old chronic nephritis is made worse by the pregnancy.

In the two last conditions pregnancy is not the cause, but a complications of the kidney affection.

The prognosis as to vision and life in cases of albuminuria is most fovorable in the kidney of pregnancy, that is albuminuria due to pressure, but very grave where there is a chronic nephritis, as most of these die within a few years; but is good in acute nephritis, both as to the eye and kidney, for a cure of both may take place. Should there be a persistent loss of vision on vision we will find a complication such as atrophy of the optic nerve or retinal detachment. Should premature labor be induced, the prognosis is better as regards vision. Should this not be done, the prognosis is not good. Culbertson's statistics of albuminuric retinitis of pregnancy shows recovery of full vision in 16 per cent., recovery of partial vision in 58 per cent., blindness in 25 per cent. More or less atrophy of the optic nerve was observed by Forster in tiree out of four women with retinitis gravidarium. These were delivered during eclampsia. The permanent retinal changes are in the form of small white spots or pigment degeneration in the macular region. All writers council the rrtificial termination of pregnancy where the retinal disease is severe.

As to the induction of premature labor, weeks of New York, gives the following indications:

1st Should albumin be found in the urine of a pregnant woman he advises the use of the ophthalmoscope from time to time to note the state of the retina,

2nd. Induce premature laborf should albumin oppear before the sixth month, dut try to tide the patient over to full term, if it does not appear until the eight month;

3rd. Should retinitis develop between the sixth and eighth month, induce labor only if the vision is impaired, that is to prevent loss of sight, or should the amount of albumin excreted be large and the amount of urea excreted be small, than labor should be induced.

Chronic intersticial nephritis may follow the nephritis of pregnancy. The more severe the nephritis in pregnancy, the more danger there is of chronic nephritis. While albuminuric retinitis may occur at other pregnancies, it seldom does.

Finally, Dr. Posey and others. have called attention to a class, where retinitis may occur in some cases of pregnancy without the presence of albumin in the urine, for instance, where the liver or other organs besides, the kidneys, are not equal to the extra work placed upon them by the excessive tissue chgnges, that take place during pregnancy. This unusual forms of toxemia may show itself quite early in pregnancy, by pernicious vomiting, headaches, failing vision, epigastric pain and restlessness. An opthalmoscopic examination should be made in all these cases as it may give great help to the obstetrician in other diseased organs than the kidneys caused by the toxemia of pregnancy.

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Legal Building.

The Watkin's Operation.*

By C. M. Strong, M. D., Surgeon to the Charlotte, Sanitarium, Charlotte, N. C.

I am unable to recall from the literature any try out results of the Watkin's operation, and I offer this as an excuse for the brevity of this paper. Will simply give my deducted opinion, based on 10 cases which have been followed up.

Every operation must have a personal equation, which has to be reckoned with in summing up results, and for this reason one should not condemn to strongly, or praise to highly another operation.

Making, therefore, due allowance for faulty technique, after treatment, and injudicious selection of cases—which is the lot of all operators—I make the following deductions, subject to modification, revision or abdonment, at any time.

As to the operation itself I will not presume on your time to describe it's technique, only in so far as is necessary to explain my conclusions. The operation was devised by Dr. Watkins of Chicago, and has been revised and modified by different surgeons, but it remains practically as he first published it.

The operation consists of bringing forward the uterine body, fixing it to the anterior vaginal wall, (this wall is mainly supported by the vesico vaginal fascia), and the blunt dissection of the misplaced bladder from its moorings. This latter step is, in my opinion, the key note of the operation.

We can see at a glance, that unless the bladder is gotten completely out of the way of the uterus, we have a pinching of the bladder, which would vitiate the operation.

The operation is not a panacea for all uterine displacement, I take it, but was devised more especially for those too frequent cases, of procadentia and hernia of the bladder (which is the pathology of so called cystocele). In these cases we almost always find the vesico-vaginal fascia attenuated or absent. This is the real cause of the cystocele, therefore the plastic operations which shorten the vaginal canal increase the trouble.

The body of the uterus having been brought forward, supplies the weakness of the anterior vaginal wall, making this operation. the only satisfactory one, in my opinion, extant.

In procadentia we find by marked anti flexion of the body, that the uterus is drawn up, and the kink removed from the vagina, thus requiring no plastic vaginal work, excent perinearrophy in cases of rectocele. It is the operation of choice with me, in cases of retro-flexion in the obese, on account of the difficulty attending an abdominal section, and the weakness of the round ligaments, and the increased abdominal pressure present in such cases.

It is the operation of election, of the patient herself, and her wishes should be considered whenever advisable.

Contraindications;—In married women with small vaginae; in child bearing women on account of the danger of future pregnacy, although it is my unqualified opinion that in cases of pronounced procadentia and cystocele, pregnancy should not occur under any circumstance, besides the resection of the tubes can be performed vaginall, as I have frequently done and have seen other operators do.
therfore the child bearing age is not a constant contra indication.

Cases of adnexal disease, for obvious reasons.

Cases of acute or chronic uterine infection because of the risk of infecting the vesico-vaginal spaces from the stitches, and by contiguity of tissue.

Cases of large uteri, because their weight puts too great traction on the stitches.

So-called fibrosis uteri, or those uteri in which there is a possibility of later malignancy. in which a future hystorectomy may be required.

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*Read before the Columbia Meeting of the Tri-State Medical Association, February 21-22, 1911.

In cases of long standing, probably bound down, retro flexed uteri, in which there has formed, in the interior angle of the flexion, a hard fibro-elastic band, which produces, too strong pull upon the sutures, this objection, however, may be overcome, by making a post-cul de sac incision, and incising this band, this is one of the recent modifications, and was tried in one of my cases, with good results.

Cases of displacement of the uterus, without an accompanying cysto-vaginocele, in these other operative proceedures are preferable. Out of 10 cases of procedenture, and cysto-vaginocele, I can report 9 cases cured,the one failure was in a case of a long standing retro flexion with the formation of a strong fibrous band, above mentioned, the tension pulling out the stitches. Even in this case there was a little improvement. Posterior division of this band would prodably have given good results.

All the other cases have shown good results, as far as the restoration of the parts were concerned. Most of them showed more or less vesicai irritation, following operation, but this subsided under vesical irrigation and sedation.

This complication is often anti operative, due to the residual urine producing a low grade cystitis, and partly due, at least in some cases to the altered position of the bladder.

The real success of the operation is the separation of the bladder from it's false position, which should be done very gently and cauticusly, to prevent bladder sequellae.

Conclusions.

The Watkins Operation, is a valuable one, especially in procadentia accompanyed by cysto-vaginocele, and in pronounced cases the only one.

It should not be indiscriminantly done.

The thorough and gentle dissection of the bladder is the sine qui non of success.

The operation should not be done without some vaginal operative experience, and knowledge of the changed anatomical relations.

The Significance of Rectal Bleeding.*

By E. H. Terrell, M.D., Richmond, Va., Associate Member American Proctologic Society, &c.

That the passage of blood through the rectum from a source higher up may be of equal importance to a local hemorrhage is not to be denied, but it is my purpose at this time to discuss only the relation of the symptom to the more important rectal and anal diseases.

Bleeding from any portion of the body is of significance, and not to be ignored. Depending upon the cause, it may be of the slightest or of the greatest importance. To determine the cause is not always easy, but if we are in the habit of making a thorough and systematic examination of every patient, taking advantage of every means at our command, we will seldom be in error.

To the mind of the patient, and often to that of the physician, the significance of a hemorrhage is frequently dependent upon the portion of the body from which it comes. A person expectorates a particle of bloody mucus and is much alarmed He loses no time in seeking medical advice. The bleeding may be from a simple ulceration of the throat or posterior nares or from a tubercular lesion of the lung. So that the symptom in itself may mean little or it may mean a great deal. but every one known that the spitting of blood is frequenty associated with pulmonary tuberculosis, and hence the alarm. Upon seeing a patient with such a history, the physician will examine him most carefully to locate the cause of the symptom, never satisfied 'till it is found.

It is rather unfortunate that the same interest is not always manifesed in less favored portions of the body. The significance may be as great,but the laity have not as yet been sufficiently educated to realize what a hemorrhage other than that through the mouth may mean.

A woman with a metrorrhagia will be inclined to postpone consulting her physician until forced to do so by the severity of the symptoms. When examined,the pathology may be found of little significance and the symptoms easily realieved, or that relentless destroyer of life, cancer, may be found at work. For too often when discovered, it would be foolish to attempt a radical cure. The best that could be hoped for is to prolong life for a short time and probably add to her comfort.

The same deploribile conditions hold true with reference to the rectum. and, if possible, to even a greater extent. Rectal bleeding is a very frequent symptom. In fact it may at times be associated with every known disease of that organ, ranging from simple fissure or hemorrhorids to carcinoma. The fact that it occurs so often and is so frequently associated with the presence of hemorrhoids, has caused the laity to look upon the symptom as pathognomonic of that disease. In fact many of them have no conception of any other disorder of this portion of the body.

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*Read before the Columbia meeting of the Tri-State Medical Association February 21-22, 1912.

To the physician this symptom, taken by itself, means nothing definite, nor has he a right to assume that it does. Neither can we take collectively the symptoms referable to any rectal disease, and make a conclusive diagnosis. There is no other branch of surgery so deceptive in its symptomatology. For instance, who can differentiate between stricture of the rectum and amebic dysentary from symptoms which the patient may give? Or, if you choose, between hemorrhoids and malignant disease of the rectum in certain stages? Too often cancer goes unrecognized and is treated for hemorrhoids. Proctology is most practical. Even with the most carefully gotten history of a case, we mnst depend in the end for a diagnosis upon what we can see or feel.

The making of a rectal examination is usually not difficult, and any one who cares to take the trouble may become fairly proficient in the methods. Of course, some experience in correctly interpreting the findings is necessary. Not only for the sake of the patient, but for his own best interests, no physician should under any circumstances attempt to diagnose and treat a rectal disease without first making an examination. He can with as much certainty diagnose an appendicitis without palpating the abdomen. The conscientious physician is a safe one. He also knows his limitations, and will not take chances further than he can help. If a patient consults you for some rectal disease, particularly if there be bleeding, and he refuses to be examined, be equally as firm and refuse to treat him. You will lose nothing by adopting this policy, but may save your reputation which is the most valuable asset any physician can have.

This as a progressive and scientific age, and we must not be content to follow the older methods, but should be constantly reaching out for better things. It is our chief aim to cure and prevent disease and suffering. It is our duy to spare no means to reach that end The greatest satisfaction is in a duty well performed.

A profuse hemorrhage may seldom happen as the result of disease of the rectum, but the loss of a small quantity of blood daily or at frequent intervals may be of even greater importance. A single hemorrhage of moderate severity, aside from a temporary physical effect, has no serious influence upon the condition of the patient. The loss of a little blood at each stool will sooner or later lead to an extreme anemia and its consequences. The following brief case report illustrates some of the effects of the loss of blood form internal hemorrhoids. The patient, a man 36 years old, was seen first on Apr. 29, 1911. He was well built and naturally of strong physique. He gave the history of having lost blood at stool, at irregular intervals, for the preceding four years. He was suffering from extreme weakness, palpitation of the heart, shortness of breath on slight exertion, pains in the chest and upper abdomen, symptoms of indigestion, &c. Blood examination showed red cells, 1,600,000, about 1-3 the normal number. Hemoglobin 30%. Upon local examination were seen three very small ulcerating internal hemorrhoids. Proctoscopic examination was negative. The hemorrhoids were removed at the Memorial Hospital, on May, 1st. 1911, under quinine and urea anaesthesia. He stood the operation well, complaining of practically no pain. His convalescence was uneventful. At the time of his return home, about May 10th., the hemoglobin had inclosed to 40%. Six months later, his physician informed me that there had been no return of the bleeding, and that he was entirely well in every respect.

To one doing rectal work such cases present nothing of unusual interest, because they are not infrequent. As happened in the case just reported, the chain of symptoms were the result of ulcerating hemorrhoids, but the loss of blood from any other cause might produce the same symptoms. Within the last few days, I removed an adenoma from the rectum of a child, who was very anemic from the loss of blood caused by the presence of this little tumor. It is important to bear in mind that anemia is often the result of hemorrhage. In dealing with an anemic patient, in the absence of some other definite cause, it is well to enquire whether there is a loss of blood at stool. If such be the case, the stoppage will be followed by a rapid return of the normal amount and quality of the blood. Aside from the symptoms directly attributable to anemia, we know, that on account of lowered bodily resistance, anemic individuals are especially susceptible to tuberculosis and other bacterial infections. This being true and granting that rectal hemorrhage is often the cause of anemia, then the relief of the symptom, when possible, is a prophylactic measure well worth considering.

As previously said, a history of rectal bleeding, however slight, demands a thorough exploration of the parts to determine its cause, for there are as many different causes for the symptom as there are diseases of the organ.

Aside from the deleterious physical effect of a prolonged loss of blood from the rectum, it may have a significance of the greatest importance. Often cancer of the rectum first manifets itself by the presence of blood stained mucus in the stool. There are other symptoms such as slight diarrhoae and intestinal indigestion which occur for a time before the appearance of the blood, but they are more or less indefinite, and usually go unnoticed.

The cancer problem is the most serious question with which we have to deal today. The disease seems rapidly on the increase, and in spite of the volumes written on the subject and the enormous amount of research work done, there has been no decrease in the mortality rate. The fault is not with the present methods of treatment, for this is fairly satisfactory, but the stage of the disease at which the treatment is given. This can not be remedied by the profession alone, because the patients seldom consult us until the symptoms have become unbearable. Then it is often too late to do more than probably prolong life a little and make the end somewhat easier.

Let us not forget that there is a stage in every cancer in which it is entirely a local condition, and, when in parts accessible, is easily curable. It is not generally known that between 5 and 7 per cent of all cancers occur in the rectum or sigmoid, and about 80 percent of malignant growths of the intestinal tract are found in these organs. If we are interested in the cancer problem, which we must of necessity be, these facts should cause us to look with more concern upon all indefinite rectal symptoms, chief of which is bleeding. Until we get a specific, in the form of a vaccine or an antitoxin, which we may never do, we must be constantly on the alert lest we overlook some of these cases while there is yet hope, remembering that the early symptoms are not fixed and constant. By a closer study of the symptomatology; by examining our patients more carefully for early signs of the disease; and by throwing a word of instruction to the laity whenever an opportunity presents itself, it is possible to do even more toward the cure of cancer than has been done in tuberculosis. Before we can hope for a lessening in the mortality from malignant disease, its diagnosis must go through somewhat the same evolutionary changes which have taken place in appendicitis and gall bladder diseases during the past few years.

Most of the symptoms of appendicitis as given in our text books of ten years ago are no longer recogonized as symptoms of that disease, but of its sequel—peritonitis. The same general improvement in methods of diagnosis must take place in regard to cancer of the bowels. It is possible and is going to come. It is the duty of us all, general practicioners and specialists, to aid in this work by making earnest efforts to recognize these malignant growths in their incipiency, and to educate the people to seek advice upon the appearance of the first signs of the disease. We must get it out of the heads of the laity that cancer is a painful disease, for pain is no more a symptom of cancer than general peritonitis is a symptom of appendicitis. It is most unfortunate that pain is not an early manifestation. If it were, the mortality from cancer would be far less than it is, for then the sufferer would be forced to seek relief while there is hope.

If I have succeeded in impressing upon a few that rectal bleeding is a symptom of every disease of this organ, including early cancer, and that it is a duty we owe mankind to seek its cause in every case, then I will consider my efforts not to have been in vain.

304 E. Grace St,

Gall Stones Complicating Pregnancy and the Puerperium: Report of Six Cases.*

By Joseph Graham, M. D., Durham, N. C.

Frequency —Gall stones occur frequently in women.

Few cases are recorded where they have given rise to symptoms during pregnancy and the puerperium. This complication is barely mentioned in American and English text books on obstetrics.

Peterson reviewed the literature, collecting and tabulating twenty-five cases complicating pregnancy and ten during the puerperium.

These cases have been classified under pregnancy and the puerperium as warranted by the development of prominent symptoms. It is perfectiy evident that gall stones originating previously may complicate pregnancy and be terminated in the puerperium and vice versa. It is impossible to estimate the first appearance of gall stones from the history of attacks of biliary colic, as the calculi may have been present for a considerable time without giving rise to serious symptoms. The diagnosis in all cases reported was confirmed by operation.

Symptomatology.—Jaundice has been a particularly interesting symptom. The majority (seventy-five per cent.) of the cases complicating pregnancy were accompanied by jaundice even when the stones were limited to the gall bladder, and jaundice was present in every case where there were also stones in the common duct.

It would appear that this large percentage of jaundice where pregnancy is complicated by gall stones is due to the tendency of pregnancy to produce jaundice in a constitutional way without the aid of blockage of the hepatic and common ducts.

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*Read before the Columbia meeting of the Tri-State Medical Association February 21-22, 1912.

Diagnosis is easy if the symptoms are typical. The important thing is to bear this complication in mind and there will be no great difficulty in diagnosing gall stone disease occurring either in pregnancy or during the puerperium.

Rupture of the gall bladder will always be confusing.

In the puerperium the diagnosis may be more difficult, as chills, fever and abdominal pain at once suggest septic infection.

Prognosis and Treatment.—The proper course is to disregard the pregnancy and treat the patient according to the gall stone indication. Cases can be tided over by medical treatment. If the gall stone symptoms become urgent, operate at once.

Pus in the gall bladder, accompanied by chills, fever, pain and jaundice, will produce miscarriage.

Operations for gall stones are no more likely to produce miscarriage than the other abdominal operations the surgeon is called upon to perform upon the pregnant patient.

Of twenty-ihree cases of gall stone operation performed upon pregnant women, reported by Peterson, only three miscarried.

The more advanced the pregnancy the greater will be the technical difficultles in carrying out the operative procedures and the necessary manipulation of the enlarged uterus adds to the liability of miscarriage.

Important considerations are the skill and experience of the surgeon and especially the type of operation performed.

We should select the procedure which can be performed in the shortest possible time consistent with the existing pathological condition.

We should avoid long anaesthesia, extensive exposure of the uterus, and reduce to a minimum all traumatism from manipulation.

Of the twenty-five cases complicating pregnancy reported by Peterson iwenty-three were operated upon with three deaths, a mortality of 13.04 per cent. Of the ten cases occurring in the puerperium, nine were operated upon with one death. A mortality of 11.1 per cent. From the nature of these cases operation was only performed for urgent indications. Therefore this was a remarkably good showing.

REPORT OF CASES COMPLICATING PREGNANCY.

CASE NO. 1.

Ruptured Gall Bladder.—Called by Dr. Geo. H. Ross to see case of diffuse peritonitis, cause unknown. The illness, of three days duration, followed a blow on abdomen.

P—, aged 36, mother of three children, six months advanced in pregnancy.

Temperature 103, pulse 160, respiration 40, abdomen distended, uniform muscular rigidity, very slight peristalsis heard on auscultation. Patient suffering extreme pain and vomiting frequently.

Jaundice present and noted. Patient said she was always yellow when pregnant. No definite diagnosis was made. Rupture of the uterus was considered.

Operation.—Incision through the right rectus revealed a large quantity of bile stained fluid, three gall stones were removed from the peritoneal cavity. The gall bladder was found to be ruptured and contained one stone; two other calculi were found wedged into the cystic duct. All calculi were removed, drainage instituted and the incision closed.

The patient died immediately after the completion of the operation.

CASE NO. 2.—Patient brought to me by Dr. J. D. Maynard.

E. P. W,, aged 38, mother of nine children, five months pregnant.

Diagnosis, acute empyema of gall bladder. Temperature 102 3-5, pulse 125. Patient jaundiced, red, flush of face, severe pain, marked rigidity and tenderness over gall bladder.

Operation. — Cholecystotomy. Removal of eighty-odd stones from gall bladder and cystic duct; no stones in common duct.

Perfect recovery. Was later delivered by Dr. R. S. Baquer at full term.

Six months ago operated upon this patient for Dr. R. S. Baquer for an ovarian cyst twisted upon its pedicle, producing gangrene and rupture of the walls of the cyst. She has had no further trouble with the biliary passages.

CASE NO. 3.—Patient referred by Dr. Montague.

Aged 36, mother of four children, seven months pregnant. Diagnosis, empyema of gall bladder, symptoms typical, local pain, tenderness and rigidity, jaundice, flushed face, temperature 103, pulse 130. Immediate operation.

Operation. — Cholecystotomy. Removal of sixty odd stones from gall biadder and cystic duct. No stones in hepatic and common ducts. Perfect recovery.

Patient went to full term and normal delivery.

Report of Cases Occurring During the Puerperium.

CASE NO. 1.—Patient referred by Dr. J. J. Nurkin. Mother of eight children, was delivered of her last child four weeks previously. Had not been well during the past year, suffering repeated attacks of colic. Had been advised to have an operation for gall stones eight years before present attack.

A few days before I saw this patient she had been seized with severe abdominal pain, followed by vomiting; pain and marked tenderness was restricted to the gall bladder area. A distinct tumor could be outlined by careful palpation and percussion. Temperature had been normal but rose to 102 the day I saw her and pulse to 120. There was no jaundice. Coccystosis 22000 and showed both albumen and casts. Patient transferred to hospital.

Operation.—Cholecystotomy. Gall bladder distended with a mucopurulent fluid, no bile, several dozen stones in gall bladder and a few stones wedged in the cystic duct.

Removal of stones from cystic duct was followed by a free flow of bile and examination revealed no stones in hepatic or common duct.

Drainage instituted and incision closed. Recovery was prompt and satisfactory.

CASE NO. 2.—Called in consultation by Dr. Wilson. Patient delivered of her third child two weeks previously; was suffering with abdominal pain, chills, fever and marked jaundice. Until I detected the jaundice I had suspected, from the history, septic infection. An examination of the upper abdomen revealed marked rigidity and tenderness. The history was the story of repeated attacks of biliary colic.

Operation.—Cholecystotomy. Stones removed from the gall bladder and cystic duct. No stones found in the hepatic or common duct. Drainage instituted, patient made satisfactory recovery.

Three months later this patient had typical attack of biliary colic followed by jaundice. These attacks were frequently repeated and jaundice was almost constantly present but varied in intensity. We had overlooked *the* important stone and it was floating in the common duct. Operation was urgently advised and declined until two years later when patient developed more complete obstruction of common duct accompanied by chills, high fever and intense jaundice.

Operation revealed the stone in the common duct. The patient reacted from the operation, but on the second day developed an crottable hemorrhage, a constant ooze of blood and gradually bled to death.

This case serves to indicate some of the difficulties and dangers of surgery of the biliary tract.

The complications are due to delay. The complications produce the difficulties and the dangers. The chief difficulties are adhesions and the *certain* removal of all stones. The chief dangers are dissecting, sepsis and post operative hemorrhage. Postoperative hemorrhage is dependent upon jaundice. The blood of a deeply jaundiced patient will not clot and the wound continues to ooze until the patient bleeds to death.

CASE NO. 3.—C. L. H., aged 39. Patient referred by Dr. J. M. Manning. Mother of five children.

Delivered ten days before present illness; normal pregnancy and normal labor. Illness began suddenly in night of tenth day of puerperium. Patient seized with sudden agonizing pain in epigastrium followed by vomiting. Pain continued constantly for the next day. No history of previous attacks. At this time there was no jaundice and no elevation of temperature. During the second night patient had a chill and next day intense jaundice developed and was accompanied by rise of temperature and frequent chilly sensations.

Diagnosis of the obstruction of the common duct was confirmed by the local pain, tenderness and rigidity. As this patient had a very weak heart and positive disease of the kidneys immediate operation was deferred by Dr. Manning and for further examination. In a few hours we found the jaundice deeper, the pulse weaker and the pain unbearable.

Operation was performed in the patient's bed room as it did not seem practical to move her to the hospital.

Cholecystotomy revealed thirty-odd small, fresh, soft stones in the gall bladder. There were no stones in the common or hepatic duct. The head of the pancreas was very much swollen and congested. Drainage instituted and the incision closed.

.The weak heart caused a most alarming convalescenc. Acute dilatation of the stomach threatened to prove fatal but was finally relieved by repeated use of the stomach tube. Patient made a full recovery. Her health is now as good as before this attack. So far as she knows this is the only attack of biliary colic. Has always enjoyed a good appetite and perfect digestion.

References.

Peterson, Gall Stones in Pregnancy and Puerperium; Transactions American Gynecological Association, 1010.

Prevention of Pauperism, Imbicility and Crime—The Paramount Duty of the State.*

By Dr. Ira M. Hardy, Washington, N. C.

One of the greatest problems of the civilized world of today and of the future is the propagation of the normal man and the normal woman. In order to attain to that high quality of human excellence, under existing social and economic conditions, we will have to begin with the children of the present and succeeding generations so as to fit them for normal fatherhood and motherhood. But aside from the normal children who are ordained to become the most desirable citizens there is unfortunately a large class of children that is abnormal through the influence of heredity at birth and after birth, through accident, mal nutrition, ill-environment, bad association and faulty up bringing.

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*Read before the Tri-State Medical Society at Columbia, S. C., February 22, 1912.

These lamentable types of abnormal childhood possess equal, if not more, claims upon our merciful sympathies than normal children who are indirectly cared for and educated at the expense of the State. The former should have special attention and training on the part of the Government in order to remedy defects and to develop hidden potencies that will give them a better chance in the race of life. These defectives, be they temporary or otherwise, if not judiciously cared for, educated and trained from almost infancy to adolescence, will be apt to fill in the future, as in times past, our alms-houses, infirmaries, asylums and prisons.

It is true that States have passed laws, more or less beneficial, for the protection, education, and training—the moral and physical well-being of helpless, irresponsible childhood, and have exercised restraining and remedial influences in the employment of child-labor, but many of our statesmen have as yet hardly awakened to the fact that abnormal children require very different treatment and training to that required by the normal. This very lack of special care produces paupers, defectives, the demented and crimidals, which cost States and nations hundreds of millions of dollars annually—not to say anything about the effect on public morals and good citizenship.

A human being, child or adult, simply temporarily abnormal, imbecilic or defective, from the want of proper treatment, should not be permitted to become a burden to himself or herself, to his impoverished family, or to the community at large. Neglect in such cases tends to fill our almshouses, reformatories, infirmaries, asylums and prisons.

Every year our various State legislatures turn out some 50,000 laws—a goodly portion of which is criminal law that inflicts penalties on abnormal persons—who from mental, moral or physical defects which could have been greatly alleviated or cured by special treatment in institutions formed by the State for such specific purposes. Indeed, it is said that half of the so-called criminal population have no innate tendency to crime.

If the State, for the time, is unable to formulate and enforce preventives of abnormal birth, it, at least, ought to in self-defense promptly take such action as will insure treatment for such congenital unfortunates, as well as that class of imbeciles or defectives who become so after birth. These types of patients are not amenable to the care and treatment usually afforded in alms houses, infirmaries, asylums, reformatories and hospitals. They are a class unto themselves and should be specifically cared for in institutions devoted absolutely to their needs. We know this is being accomplished by institutions of this kind and character by some of the more advanced States of Europe and of our National Union.

Many social problems in other directions are being met with, preventives, palliative or remedial measures—but the one great problem of defective child-life in this country, has not as yet received that special attention and thoughtful consideration of the state which it deserves. Until within a decade or so ago, Northern Europe, England, Germany, France and Italy had but just given it legislative attention. The successful results which have followed the founding of unfortunate children, abnormal intellectually, physically and otherwise, have been so manifest for the general good of society and the State—that there has been a more or less marked diminution in their number. The same is also true of some of the more advanced Northern States of our National Union—notably Massachusetts, New York, New Jersey, Pennsylvania and Ohio. These have established specific schools or institutions for the special training of the feeble-minded, or for those who through congenital or external causes have become mental, physical, or moral defectives—entombed in the indefinite category of the abnormal, as contrarily distinguished from the normal, and for whom hitherto there had been no hope except in renewed imprisonment or death—thus destroying the child—making them social and moral outcasts.

North Carolina has been the first real Southern State to take the initiative in this humane direction which now is beginning to develop into a grand and beneficient institution. Her twin sister, South Carolina, who has been great in every cause which she has espoused for humanity and liberty, should follow suit and establish a similar institution for the redeeming of the mental, moral and physical derelicts of unfortunate childhood and youth, so as to prevent and limit much of the pauperism, insanity and crime now more or less rampant throughout the State. By doing this, it will save the latter millions of dollars annually of needless expense, and at the same time, be a means of social, moral and political uplift for the people generally.

It is our duty as a people and a State "to do day by day, with all our might as best we can for the common good of the whole people, the task which lies nearest to hand," and that is the care and well-being of the mentally, physically defective children and youth in our midst. This can only be accomplished—as experience has told some of the older and more advanced states of Europe and of our National Union—by special medical, moral and physical training schools—adapted to all the grades and requirements of imbeciles.

This grave and humanitarian question—the education, training of the feeble-minded—being just, right and merciful—it should be fought through to successful fruition by the people of South Carolina, as it has already been done by her sister State, North Carolina.

A distinguished humanitarian says: "No human wisdom has ever been able to get the heart of a great public question with instant and unerring penetration. There must be trials, experiments, blunders and failures." Admitting all this, the schools, or educational and training institutions for the feeble-minded in the various States as well as in Europe are no longer experiments but are founded on as solid a basis as our common school system.

We know that in the prisons of the country not one boy in ten is normal, or is taught a useful trade which he can follow after his release therefrom. In fact, Leavitt, an authority upon the subject, in his work, "The Man in the Cage," says: "There are not ten prisons in the country today which teach the prisoner a useful trade, and scarcely one, so far as we know, which permits him to make any reasonably decent provision for his family. More than half of them have been convicted of violations of law which do not necessarily imply a criminal bent in those perpetrating them." It also should be remembered that a large proportion of these unfortunates are boys—ranging from 16 upward—who are to some extent irresponsible through abnormalities, which probably could have been remedied by early institutional treatment and training. Indeed, to be a normal, healthy child, or man or woman, means more or less "suppression of what is strongest in his or her nature." We all know that human nature has varied needs, and among its greatest needs is the imperative one of work, wisely and beneficially directed.

Poverty, in the existing social state, is inevitable, but pauperism is evitable. While it is said the fittest only survive, it is none the less our bounden duty to make the unfit the more self helpful, which can be done by establishing schools for the feeble-minded.

Prevention of Puerperal Infection in Private Practice.*

By Dr. W. W. McKenzie, Salisbury, N. C.

The benefit of antiseptic treatment in hospitals has been so enormous that all criticism has been silenced and every doubt vanished.

From one end of the civilized world to the other the treatment is essentially the same, but how different it is when we come to private practice.

So recently as 1875 the International Congress of Physicians and Surgeons assembled at Brussels, Belgium, adopted resolutions to the effect that, on account of the great mortality in lying-in asylums, all such institutions should be abolished.

Since that time the tide has turned, the hospital is now the safe place for a woman to be delivered in; it is in private dwellings that the danger lurks. The poorest, dirtiest and most dissolute women are safely confined in a hospital, while the richest, the youngest, the purest and the loveliest sometimes succumb in giving birth to a child in their own homes.

In the private obstetric practice of the writer there have been only two deaths referable to infection; the reason of this is that I have always used the strictest antiseptics. I am sorry to say that it is a fact, that many general practitioners do not use any antiseptic precautionary measures whatever and as a consequence many deaths follow childbirth and abortion. Some smile benignly at the mere thought of using such super-fenom measures in private practice: others have a little mercuric, chloride or carbolic acid around the house but use it without system or perseverance.

Still there is much greater danger of the patient being infected by the doctor or the nurse in private practice than in a well appointed lying-in hospital. The doctors composing the house staff of a lying-in asylum are strictly forbidden to enter the wards of a hospital; they have no private practice; they do not see an autopsy and if the maternity is a department of a general hospital, the clothes and the bodies of the nurses and doctors before going from one department to another are subjected to thorough disinfection.

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*Presented to the Tri-State Medical Association at Columbia, S. C.

In private practice, on the contrary, the physician may have treated a case of diphtheria or erysipelas a few moments before being called to a confinement, and nearly all private nurses take promiscuous medical, surgical and obstetrical cases, disinfecting themselves as best they know how or according as the combat between innate laziness and acquired conscientiousness prompts them. As a matter of fact the mortality in private practice is much larger than in hospital practice.

Country practitioners are still greater opponents of antiseptic midwifery than their professional brethren in the cities, the country practitioner relying on the purity of the atmosphere and the robust constitution of his patient. If, however, these conditions may help the women to get well, they cannot to any great extent prevent them from being taken ill.

In many respects country practice exposes the patient even more to infection than does city life. In most places there is no drainage, manure is spread over the fields or garden close to the house in which lives the farmer and his wife. The country practitioner cannot go home and change clothes and bathe; he must make his round or he would never get through his work; and then it happens that the same hand that was thrust into a perineal abscess, that performed tracheotomy on a child suffering from diphtheria, or that dressed some septic wound, at the next house is brought up to the fundus of the uterus in order to take away an adherent placenta. I hold that the same antiseptic precautions that have revolutionized lying-in hospitals should be used as well in private practice, be it in the city or country.

In practice in well-to-do families we should choose large, airy, sunny rooms, situated as far as possible from the water closet; should, however, the lying-in room be close to the water closet, with a door leading directly from one to the other, this door should be locked and some of Platts chloride or other powerful disinfectant should be poured frequently into the basin.

More important is the bed upon which the patient lies. This should always be protected by macintosh covered by clean sheets. Even amongst those in comfortable circumstances there is a tendency to employ and use at a confinement any old linen and clothing that is available This, of course, is quite permissible if such articles are thoroughly cleaned beforehand, but unfortunately that is hardly ever done. I feel convinced, however, that if nurses and practitioners would impress upon the patients the importance of having clean garments for the confinement, the majority of the patients would respond to such a suggestion, and have everything ready that was required. It entails little, if any, expenditure of money and should be as easy for those with only limited means as for those in comfortable circumstances. All instruments and appliances must be sterile. The physician should clothe himself in a sterile gown. The preparation of the hands of the obstetrician is the most important part of his toilet, although it is somewhat disappointing to think that it is impossible to sterilize the hands completely by any known device, it is a matter of great satisfaction to learn that the simplest of all methods of cleaning them is the best. The principal provisions in a successful and mechanical cleaning are hot water, soap, and a scrubbing instrument to be used during the washing, and a rough towel with which to rub the hands. As regards the hot water, the important matter is that the water should be running or frequently changed, as otherwise one rubs into the skin organisms which have already been removed. I use synol soap. Particular attention must be given to the thorough cleaning of the finger nails. I prefer a bone nail cleaner and gauze. It is best to use two nail brushes, one for the first part of the scrubbing and the other for the second part.

Having completed the scrubbing of the hands, which should occupy about seven to ten minutes, the next consideration is the antiseptic that should be subsequently used, there are three generally employed in practice, carbolic acid, mercury (either bichloride or biniodide) and alcohol.

My experience has been that a more thorough cleaning of the skin is obtained by 1 to 1000 mercuric iodide.

Without a doubt this exhaustive cleaning of the hands is very irksome, and occupies a considerable amount of time, therefore the busy practitioner is apt to scamp it. I cannot, however, see how it is to be avoided if the mortality and morbidity in child-bed is to be lessened.

In recent years a further means of protection against conveying infection is the employment of gloves. This in no way lessens the necessity of thorough cleaning of the hands beforehand; gloves are only an additional protection against conveying infection. Of course it is understood that the gloves must be sterilized before using. The vulva must be thoroughly cleaned by means of soap and water and finally swab the parts with 1 to 30 or 1 to 1000 biniodide of mercury and alcohol. The biniodide is very much less severe on the hands than the perchloride and I prefer it for that reason.

Parke, Davis & Co. have recently gotten out a very attractive Germicidal dises. It consists of mercuric iodide gr. 3/8, sodium bicarbonate gr. 1/6, and potassium iodide gr. 3/8. This is non-corrosive and will not attack steel, nickel or lead; it is also non-irritating, less toxic than other salts of mercury and does not coagulate albumen.

Postpartum douching I only employ in cases of hemorrhage and when the placenta or membranes have been removed manually and as far as can be judged at present that is the general attitude assumed towards douching after delivery. I instruct the nurse to always use mercury bichloride 1 to 4000 in bathing the external genitalia and keep her hands sterile.

Some Practical Conclusions as to the Cause of the Increased Death Rate Above Age Forty.*

By Dr. J. C. Walton, Richmond, Va , Proprietor of the Hydro-Electric-Therapeutic Sanatorium.

Why has the death rate increased above age 40, and why has it decreased below age 40?

According to American life insurance statistics the annual death rate per 1000 population has been reduced since 1880 about 20 per cent.

This has been largely due to the education of the masses as to the causes and the prevention of disease, viz.: the exanthematas, diphtheria, smallpox, typhoid fever, tuberculosis, and also to the great diminution in infant mortality by teaching mothers how to properly care for and to feed their little ones.

It is only a few years since an educational campaign was started by one newspaper to check the foolhardy deaths and injuries from the Fourth of July celebrations and the annual deaths have been reduced from 466 in 1903 to 57 in 1911.

The campaign in New York City to reduce infant mortality by education and the Straus pure milk stations has lowered the death rate from 227 in 1905 to 125 in 1911.

These are but few of the very many recent instances that illustrate the good results in life saving from educational methods.

A still more aggressive educational campaign will give still better results. The above figures are very significant for there still remain preventable or postponable diseases against which no war has been waged, and these diseases are steadily on the increase.

Why should the death rate in the United States show such a heavy increase above age 40 in recent years, while it has actually decreased during the same age and period in England and Wales?

Can there be any local reason for this excessive loss in American life?

The following statistics from the Human Factor, published by "The Equitable Life Assurance Society," are of great interest to physicians and to sanitarians.

The decrease in the death rate under 20 is 17.9%; from 20 to 30 is 11.8%; from 30 to 40 is 2.3%.

The increase in the death rate from 40 to 50 is 13.2%; from 50 to 60 is 29.2%; 60 and over is 26.4%.

"Chronic disease kills half of the people who die in the United States, or about 750,000 annually. Half of these, that is 375,000, would not die if the average health were as good as thirty years ago.

"This enormous increase in the mortality rate from chronic disease has escaped the attention of sanitarians because of the notable decrease in the general death rate, as the result of a decrease in deaths from acute diseases so great as to more than equal the increase in deaths from chronic disease.—N. Y. Medical Journal, Sept. 2, 1911.

The actuaries of prominent life insurance companies assert that the mortality from chronic disease has doubled in the last 30 years. While medicine has accomplished wonders in reducing the mortality from acute disease, it has signally failed in the prevention and treatment of chronic disease

Therefore as the old remedies have been faithfully tried out in the crucible of experience and have been found wanting it is incumbent upon the conscientious physician to get out of the old ruts and to adopt modern and up-to-date methods in the treatment of the very many serious conditions that are always confronting him.

Statistics show that this marked increase in the death rate above age 40 is from arterio-sclerosis with its resultant cardiovascular, renal disease, apoplexy, paralysis, and the degenerative diseases common to middle age and old age, against which no measures of prevention have been waged, although they are to a very large extent preventable or postponable diseases, especially so if they are early recognized and properly treated.

Whatever the cause may be it is a sad commentary and reflection upon the medical profession that no campaign of education and no measures of prevention have been taken by them to prevent this needless waste of life. Why not? Isn't a life saved from arterio-sclerosis, apoplexy, heart or kidney disease just as valuable to the community as a life saved from typhoid fever, tuberculosis, or accident?

Arterio-sclerosis causes the majority of all deaths after fifty. It is immaterial whether you label it apoplexy, paralysis, cardio-vascular or renal disease the underlying *pathological* conditions *are in all cases the same* save only in those cases of heart and kidney trouble that have been caused by rheumatism and scarlet fever.

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*Read before the Columbia meeting of the Tri-State Medical Association February 21-22, 1912.

Therefore, assuming that arterio-sclerosis is the most common cause of death after fifty, and that it is a preventable or, at the worst, a postponable disease, the limited time at my disposal will permit only a very brief allusion as to its causes, prevention and treatment.

The causes of arterio-sclerosis are manifold; among the more common ones are the degenerations of old age, the strenuous life, intemperance in eating and drinking, an excess of proteid diet, intestinal indigestion, gout, rheumatism, syphilis, tobacco, alcohol, &c.

The cause should be diligently sought for and if possible removed, the patient should be taught to lead the simple life, to avoid all excesses both mental and physical, to observe regular habits, to keep the sewers open and active and to avoid all excesses in eating and drinking, especially the heavy meats, tea, coffee, tobacco, alcohol, &c.

I cannot emphasize too strongly the importance of intestinal toxemias. Frequent examination of the urine should be made for indicanuria and for acidemia, as it is now generally conceded that arterio-sclerosis is caused by some abnormal or toxic material circulating in the blood which acts as an irritant to the vessel walls.

It is also important to remember that in elderly people there is a decline in the sensibility and in the motor power of the large intestine, and in all these cases active elimination from the bowels and skin are of vital importance. If possible regulation of the bowels by laxative foods, fruits, and physiologic exercises, and if necessary resort in addition to a judicious combination of aloin, cascara, senna, salines, and colonic irrigation.

Waugh says that aloin acts most powerfully on the rectum, cascara on the rectum and the descending colon, senna on the cecum and the ascending colon. He further says that senna if long continued wears out sooner than the others and that aloin and cascara in proper doses may be continued for years without loss of their efficiency.

Lorand, of Carlsbad, says of old age and the chronic morbid state: There are three great causes, the slowing of the processes of oxidation, the increase of the connective tissue in the arteries and the other organs, and the auto-intoxication caused by the retention of toxic matter following the defective working of the organs whose function it is to destroy and eliminate such matter.

Tobacco is the most extensively used narcotic poison in the world and it is considered to be one of the causes of arterio-sclerosis, of myocarditis, of functional and organic heart disease and of amblyopia.

As nearly all alcoholics are first addicted to the immoderate use of tobacco and as tobacco is a vaso-constrictor and as alcohol is a vaso-dilator, the use of one in a measure counteracts the effects of the other on the circulation, and therefore tobacco may be regarded as one of the pre-disposing causes of alcoholism.

The records of Yale college for eight years showed that the non-tobacco users were 20 per cent. taller than the smokers, 25 per cent. heavier, and that they had 66 per cent. more lung capacity.

Tobacco affects the heart and the blood vessels and may produce spasm and angina pectoris. This is especially the case in old smokers. It also retards the absorption of oxygen by the hæmoglobin, and the nervous and the arthritic are more susceptible to its toxic effect.

It is thought that tobacco lessens the resistive capacity and renders the organism more susceptible to infection, especially tuberculosis.—Shoemakers Therapeutics.

Alcohol.

Ah! brandy, brandy, bane of life,
Spring of tumult, source of strife,
Could I but half thy curses tell,
The wise would wish thee safe in hell.

I remember once hearing a clinical lecture to his classes on alcohol by the celebrated Roberts Bartholow, in which he stated that more than three-fourths of the crime, the insanity, poverty and disease were caused directly or remotely by alcohol.

Alcohol fills our jails, hospitals, and almshouses. A very wise old physician once said that alcohol kills people in a thousand ways.

Alcohol is a recognized cause of chronic gastritis, cirrhosis of the liver, atheroma, and the degenerative diseases of the heart, kidneys, and nervous system. We all know that the habitual drinker has but slim chances of recovery from any severe illness or accident.

Our modern club life with its richly seasoned dishes of animal foods and alcoholic drinks are the recruiting grounds for our hospitals. There can be no question as to alcohol being a frequent cause of arterio-sclerosis and of the degenerative diseases of middle life and old age. Intemperance in eating probably kills as many as intemperance in drinking and it strikingly verifies the old adage that "a great many people dig their own graves with their teeth."

Early recognition and treatment of these degenerative conditions of middle life and old age is very important, for being forewarned is forearmed and prevention is always better than cure.

As increased blood pressure seems to be the earliest premonitory symptom and the forerunner of all subsequent changes in this vicious circle of cardio-vascular renal disease it is necessary to make and record frequent and careful smygmographic tracings as a routine measure in all the cases, and as there is often a difference in the tension of the arms from five to twenty mm., the tension should always be taken in both arms.

The N. W. Mutual Life Insurance Co. reports 12,647 persons insured between the ages of 40 and 60, the average blood pressure as follows: 40 to 44, 128.26 mm., 45 to 49, 130.51 mm., 50 to 54, 131.98 mm., 55 to 60, 134.46 mm. A record of 420 accepted cases under 40 showed an average pressure of 125.20 mm., 26 applicants under 40 with a pressure of 150 or over were rejected. In 732 persons declined for insurance in whom the blood pressure averaged 171.03 mm. there were 32 deaths, a percentage of 155.27 mm., almost four times greater than the general average for the same two year period. The average pressure in these 32 fatal cases was 183.61 mm. The causes of death were as follows: Angina pectoris 2, aneurysm of the aorta 1, apoplexy 7, arterio-sclerosis 1, appendicitis 2, cirrhosis of the liver 2, organic heart disease 7, nephritis 8, suicide 1, Stokes-Adams disease 1.—Med. Council, Phila.

The above statistics would seem to indicate the great value of the smygmomanometer to the physician and to the life insurance examiner as important diagnostic and prognostic aids.

My experience in the treatment of several hundred cases of arterio-sclerosis by regulation of the diet and habits in conjunction with cabinet (electric light bath) and high frequency currents (d'Arsonval) derived from a large high speed static machine fully convinces me that with early diagnosis and prompt treatment by the above measures that the period of life beyond age 40 may be greatly prolonged.

This assertion seems reasonable when we consider that arterio-sclerosis is a condition due to diseased metabolism accompanied with defective oxidation and deficient elimination with derangement of the vaso-motor centres.

High frequency (d'Arsonval current) profoundly affects the chemical processes of the body, increases oxidation and elimination, corrects faulty metabolism and is a vaso-motor dilator and regulator and can be uniformly relied upon to reduce tension, increase elimination and to relieve nervousness and insomnia.

If used early before serious organic changes have occurred in the arteries and other organs it will give the most gratifying results, and even in the old advanced cases it will greatly promote the comfort and well being of the patient and will also delay or postpone a fatal termination.

Puerperal Septicaemia in Some of its Phases.*

By Dr. Thomas E. Anderson, Statesville, N. C.

Mr. President and Gentlemen of the Tri-State Medical Association:

In any and all of them it is terrible, for of all the grim, gaunt wolves that hunt for the fairest of earth's creation it is facile princeps. Bunyan pictured in the way before Christians, two lions of savage aspect, which struck dismay into his heart, but a closer view revealed that they were chained. Not so with this relentless foe to womankind, no fetters bind it, and it is ever ready to destroy. When we consider, that as a measure of relief such a radical procedure as general hysterectomy, the removal of the uterus and all its appendages, has been seriously advised and performed, we begin to catch some idea of the formidableness of this malady. And I come to the discussion of it with much the same motive which prompts the traveler to journey to the Rock of Gibraltar to gaze upon its proportions and mark its invincibleness, with small hopes of adding anything to our armaments in dealing with this evil.

Dwelling and working as I do, somewhat apart from the "madding crowd," or in other words, removed from the centers of medical thought and action, where systematic investigation is carried out, it has ever been my province to accept and endeavor to put in practice what earnest workers are evolving in the laboratories. For this reason I cannot be expected here to either destroy the ancient landmarks or erect newer and truer sign boards, along the way, for our guidance. Aud in this I merely propose to outline what other and abler men are doing and advocating in dealing with this infection. It was in this field that serum therapy excited great hope, but from my limited viewpoint I think I may say that that hope has not been realized and that its results have been disappointing.

In this presence it is scarcely necessary to portray the history and the mode of access and the phenomenon attending the entrance of this malady to the parturient room. We are, with the exception of those fortunates, who never see it in "my practice" and are wholly dependent on their less fortunate brethren for kindly permitting them to see it in the capacity of consultants, familiar with its history and onset. Just here I will digress to say, that I don't believe any doctor doing a general practice of any proportion and years has failed to have the trail of this serpent cross his pathway, no matter how faithful he tried to carry out prophylaxis. The initial chill coming on 3rd or 4th day, the establishment of fever, the arrest of the lochiæ, the anxious facies both on the part of the patient and the luckless doctor concerned, for I am persuaded that many of us have come, seen and been conquered. Splendid results, says one writer, have rewarded investigators seeking the origin and character of puerperal infection. That it is not a specific fever, but one subject to the same laws as are the various wound fevers of the body, has been proven. The application of general laws of asepsis and antisepsis to its prevention has been successfully demonstrated. In other words, the same precautions in its prevention and cure should be observed as n surgical operations and measures. Due, as well established, to the entrance into the system of pathogenic germs in the majority of cases the septicæmia is due to the class, streptococcus or staphylococcus, but there are often combined or mixed infections, in fact one author, Hirsts Obstetrics, mentions some forty microorganisms that may be concerned in its production, ranging all the way from the mild varieties to the malignant "Streptococcus erysipelatous." Perhaps the placental site, which after parturition is an unprotected "raw surface," is the most fruitful field, though the various abrasions along the maternal tract, the deep lacerations of the cervix, exposing the lymphatics, a post-partum hemorrhage, filling the uterine sinuses with clotted blood and exposing the veins and connective tissue make the pathology of puerperal fevers very complex and the treatment difficult from the hidden character of the uterine wounds and exact site involved.

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*Read before the Columbia meeting of the Tri-State Medical Association February 21-22, 1912.

In the progress of this malady pyæmia may add its lethal effects, being superinduced by absorption from foci of infection in the way of pus deposits in the walls of the uterus, in the tubes, ovaries and adnexia, which if not evacuated destroy all hope of cure.

Having thrown some of the salient points on the canvass I want to bring before you in a suggestive and imperfect way some of the means at our hand in dealing with this infection. Prof. Ayers, of the New York Polyclinic, whom I shall follow in outlining the management of these cases, says that puerperal infection is always "primarily exogenous in origin" and hence, as in nothing else, is "prevention" so valuable. The great majority of these infections start in the vulvo vaginal region, emphasizing the necessity of absolute asepsis in conducting labor cases. This applies especially to the hands of the accoucher, which should be scrubbed scrupulously clean with green soap, using the nail brush, afterwards bathed in a solution of 1 to 5000 of corrosive sublimato, then a 2 per cent. solution of creolin; thorough movement of bowels and kidneys should be secured; the pudenda and vagina well washed and an antiseptic pad piaced over the vulva ond thus prevent infectiou from withonf. Most of these cases are seen following abortions, and in no case should exploring of the uterus be omitted, the aseptic finger being the most available and best instrument. This is most generally possible as the cervix is patulous and the uterus with the hand externally can be easily crowded down into the pelvis. In the withdrawal of the finger the odor will tell if there is any necrotic matter present. In those cases where the cervix is not patuious sufficient to permit finger examination then a curettage by a small blunt curette should be done, and there are few cases where this cannot be done satisfactorily and safely. If labor has been accomplished without the introduction of hands or instruments within the cervix and infection appears, prompt local irrigation of the vagina with corrosive sublimate solution, the cautsrization of sluggish ulcers and the profuse use of iodoform will check inflammation and keep infection from extending to the uterus in the majority of cases. Fissures and lacerations, if not sutured, should be filled with iodoform powder. The treatment of intrauterine infection deserves special consideration. Within this cavity there may be blood clots that must decompose if not expelled by after-pains, pieces of placenta and even a gangrenous endometrium. Here it is that the exhibition of drugs become a farce, and uterine irrigaiion a delusion and a snare; here the rules of surgery must be carried out, removal, drainage and disinfection. The indication is clear, then, to prevent absorption of any more poison, hence the rationale of washing out the uterus with a solution of corrosive sublimate 1 to 4000. The fountain syringe should not be held more than two feet above the level of the uterus. A quart of freshly boiled water should follow the antiseptic to prevent poisoning. The intrauterine douche, besides cleansing, also causes the uterus to contract, thus closing the mouths of the uterine veins. The loss of tonicity and contractility is a marked peculiarity of the uterus in puerperal fever. If sepsis has already penetrated into the lymphatics but little can be accomplished by further intra-uterine treatment. The character of the intra-uterine surface differs in post-partum infection from that following abortions, in being softer and much more fragile, therefore where the curette is resorted to, only the blunt one should be used, which should be made to gently traverse the entire uterine surface, thereby loosening bits of adhering placenta, blood clots and the remnants of the uterine serotina, following with a stream of bichloride solution, again not allowing the syringe to rest much above the level of the womb, at the same time keeping the cervix well dilated.

In conclusion, Prof. Ayers says, I am tempted to say that all this treatment is worse than useless unless followed by "the introduction of iodoform gauze up to the fundus."

Polk has shown, and many others since, that many cases did not do well until the treatment included gauze drainage, and the modern profession owes much to him for introducing it into the treatment of uterine diseases. In using it, the gauze should be cut in a strip from 2 to 3 inches wide, and from 1½ to 2½ yards long; it should be packed well into the fundus down to and through the cervix into the vagina; this gathers loose debris of blood, pus, membranes and germs and *above all* provides *uninterrupted drainage*, a consummation most devoutly to be desired, literally without which nothing
It also stimulates granulation and excites uterine contraction. It may be left in situ for 24 to 72 hours, according to the symptoms.

Like Dante's guide through the Inferno I have led you through this labyrynth of words merely to show you and to impress you with the all importance of this iodoform drain.

Dysmenorrhea: Etiology and Treatment*

By Dr. J. T. Burrus, High Point, N. C.

Perhaps one of the most, if indeed it be not the most, intensified conditions which presents itself to the gynecologist for treatment is that which produces painful menstruation with its prelude and sequelæ. As I understand it, the term "dysmenorrhea" indicates a symptom, not a disease, and in this paper I am discussing the cause.

Authors on gynecology have presented various types of dysmenorrhea and classifications of its varied forms of symptoms. For instance, Dudley classified dysmenorrhea under two heads: First, as local conditions, and second, as general or constitutional conditions. He speaks of the local conditions and sub-classifies these into inflammatory, mechanical, ovarian, tubular, malformations; these suggest the symptoms which are produced by the various kinds. Byford, in speaking of classification, classifies dysmenorrhea as of neuralgic, inflammatory, mechanical, membranous, and a mixed type.

No matter what the classification, however, the conclusion is certain that as yet we have been unable to follow out any line of treatment directed specifically towards the varied classification in which we have been able to relieve the symptoms as presented by many cases.

The Inflammatory Type.—Endometritis, cervical endometritis, salpingitis, ovaritis, due to any of the infective micro organisms will produce dysmenorrhea. To my mind, the exfoliation of a membrane during menstruation produces dysmenorrhea of the inflammatory type, although some class it as membranous.

The Mechanical Type.—Anti-flexion, retroflexion, tumor formation, either of the body of the uterus, ovaries or tubes, produces painful menstruation.

The Neuralgic Type.—Neurotic women in a weak, debilitated, rheumatic condition, where perhaps hypothyroidism or hyperthyroidism exists, suffer frequently with dysmenorrhea.

Multiplication of lymphoid cells, being extravacated into the mucosa or sub-mucosa of the uterus thickens the mucosa and submucosa, lessens the arterials, thus disturbing the circulation in the uterus and its appendages, producing a spasmodic contraction of the uterine muscles, squeezing excessive mucous from the uterine cavity, or in the effort to deliver itself of intramuscular tumors or intra-uterine, thereby producing pain.

A patient will manifest inter-menstrual symptoms when suffering with dysmenorrhea due to inflammatory conditions in the pelvis. In other words, it is a case of relieving pressure, for pressure most surely exists in the great majority of these patients who are thus suffering. Usually the plane of circulation in the uterus and its appendages has been disturbed, and both the arterial supply and the venous return of the blood from the uterus, together with the disturbance in the lymphatic circulation of the uterus, answers for a great many of the conditions which are manifested by these patients.

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It is all well and good to classify conditions for study and discussion, so as to make a beautiful hypothesis which one would be interested in reading, but to relieve this symptom, dysmenorrhea, is indeed a very different condition and the results are not as beautiful as some would have us believe. I do not think that I have any patients who come to me with more anxious desire for relief than those who come and tell me that they suffer intensely either preceding, during or succeeding menstrual epochs. As a result of my own experience I have come to look at dysmenorrhea from one of the following four view-points: First, that it is due to the uterus; second, to the tube; third, to the ovaries, and fourth, to the nervous system.

The uterine symptoms present themselves somewhat after this fashion: Beginning a few hours preceding menstruation and continuing until the flow is well established, there is pain in the first, second and third degree. This may be due to an antiflexion or retroflexion, uterine's growth or stenosis. This condition is usually responsible for metritis and endometritis.

Dysmenorrhea due to the tube or ovaries are both classifiable under the head of one class of symptoms because of their similarity. For two or three days, and ofttimes as long as a week preceding menstruation, there is an intense pain which usually continues through the menstrual epoch, but in many cases the pain ceases as soon as the flow is established.

From the standpoint of the clinition perhaps the neurotic type is the most interesting, for there it is that the greatest measure of tact, persuasion, encouragement, assurance and firmness toward the patient must be exercised; indeed, we may well congratulate ourselves if we succeed in saving this class of suffering women from the woes of the neurasthenic's sanitarium, the insane asylum, or the grave. The condition is one that should be watched with the most scrutinizing eye.

Treatment.—The treatment of dysmenorrhea depends on the cause of the dysmenorrhea. If we think that we can cure every woman who comes asking to be relieved of painful menstruation by D. & C. we must prepare ourselves to be sadly disappointed, for the disappointment is sure to come. Search for the cause and direct your treatment accordingly, whether such treatment be surgical or medical, or both.

If the dysmenorrhea be due to the neuralgic form, treat the neuralgia; if due to hyperthyroidism, diminish the amount of thyroid secretion which is being pumped into the system; if due to hypothyroidism, give thyroid extract and those agents which stimulate the secretion of the thyroid glands; if due to anæmia and general debility, increase the resistance of the patient and build up the blood supply by tonics, hygiene and exercise; if due to neurasthenia, be patient, firm, kind, persuasive, considerate and tactful, and endeavor to relieve the neurasthenia; if due to the ovaries, apply the treatment most applicable for the relief of the ovarian irritation or inflammation, either medicinal or surgical; if from the tubes, apply those things which are necessary to relieve the tubular involvement; if due to the uterus, let the treatment be directed to the uterus.

In the beginning of my experiences I felt it a great neglect if I did not dilate, curette, irrigate and applicate the uterus of every woman who came to me suffering with painful menstruation. I persuaded a goodly number to submit to the ordeal with my assurance that they would suffer no more at their menstrual period, but it was to my great chagrin and confusion that many of these patients returned to me, saying: "Doctor, I am just over my menstruation, and have suffered the most I ever did." This sort of experience being repeated a great many times finally awakened me from my slumbers, and I began to feel that the thing we called dysmenorrhea was not always relieved by a simple dilating and curetting of the uterus; therefore, I began to inquire and make diligent search for some means whereby I could relieve this class of suffering humanity. I have not reached a point, as yet, where I feel that I can cure every case of painful menstruation, but I do know that my percentage of cures now is many times greater than what it was ten or twelve years ago.

I know of no better way to deliver to our friends and co-workers the things which we are doing and the agents from which we get results better than to enumerate the instances from our own experience. I wish, therefore, to mention briefly one or two of the cases which have come to me for treatment.

CASE 1.—Miss D., aged 20; family history, negative; personal history, had never had any serious sickness; began menstruating at the age of 17; she was regular, menstruating without pain for a period of two years; at age 19 she began to suffer at menstrual periods, the pain becoming more severe at each menstruation, until the picture which she gave me was more like that described by a woman being delivered of a child, than of one telling of her menstruation. This pain began one week preceding the menstruation, and continued to and including two or three days of the menstrual epoch, after which time she gave evidence of extreme tenderness over the left iliac region extending through the hypogastric region and to the right iliac region. This tenderness continued for four or five days following the menstruation and then she was apparently well until the next malaise appeared. This patient gave a history of previously having undergone a dilation and curettment without the slightest relief, stating that following the procedure she had suffered more than before. Six months after this dilation she presents herself to me. I elicited by bi-manual examination a mass posterior and to the left of the uterus which was exceedingly tender. I advised an operation, and the advice was accepted. Just here I wish to state that the uterus was not dilated or curetted or irrigated or applicated, but the abdomen opened, and it was found that an ovarian cyst about the size of an orange which was adhering to the tube, the uterus and the intestines was released from this bed of adhesions and removed. The vetro-displacement of the uterus was corrected by the shortening of the round ligaments according to Mann's method. The patient made an uneventful recovery and has not suffered with menstruation since that time. She has rapidly gained in weight, and is apparently in perfect physical condition.

Case No. 2.—Age 19; family history, negative; personal history, had typhoid fever at 12, but no other serious sickness, and had always been well. At the age of 14 began menstruating; her menstruations were normal in every way, the menstrual period lasting for three days; at 17 she began suffering excruciatingly with her menstruation. The pain began a few hours preceding the appearance of the flow and was of the most intensified character, necessitating hypodermic injections of morphine and at many times repeated to relieve this condition, but as soon as the flow was established the pain ceased. Upon bi-manual examination I found an extremely antiflexed uterus with a small cervix and a pin point os. I advised dilatation, which advice was accepted. After dilatation the uterus was gently curetted and a Wyley intrauterine pessary placed in the cervix. The patient was kept quiet and in bed for a period of ten or twelve days during which time she menstruated without pain. The Wyley pessary was left in through the next menstruation (at which she did not suffer). Since that time two years have passed without the least trouble with her menstruation.

This paper will no doubt be found to be quite fragmentary and incomplete, but it will have served its purpose if it brings forth free discussion, for as I said, not all of these cases are we able to cure, and there is much yet to be learned before the positive cure for each and every case is reached.

Blood Changes in Workers with Roentgen Rays.—Jagic, Schwarz and Liebenrock (Berl. Klin. Woch.) have examined the blood of a number of "Roentgenologen," and others exposed more or less in their work to small but frequent doses of Roentgen rays over long periods of time, and set forth their results. They were led to this investigation by the fact that one of them (Schwarz) had observed a case of leukaemia in a chemist whose business exposed him for a lengthened period to radium emanations. Other cases of death from leukaemia of workers with Roentgen rays have occurred; also, experiments on animals have shown that exposure to Roentgen rays may cause changes in the blood in normal individuals. It is clear, remark the authors, that the protective measures employed by workers in Roentgen ray laboratories are not completely effectual. They are exposed to a small proportion of the primary rays which filter through the interposed media, and also to the secondary rays which permeate the whole room in which the work is carried on to such an extent that a fluorescent screen, although not exposed to any direct or primary rays, is still to some extent excited to action. Altogether, the results of the examination of the blood in ten individuals are given in detail. Most of the cases were men who had worked for years with Roentgen rays, always, except in the earliest years, with protective apparatus; most of them were apparently in normal health, or complained only of slight general weakness. There was, in all the cases, a slight but definite diminution in the total number of leucocytes in the blood. The number was either below the normal or near the lower limit of normal variation. The diminution was chiefly in those leucocytes which originate in the bone marrow—that is, the neutrophile polymorphonuclear leucocytes. It was a striking fact that the acidophile leucocytes were in some cases altogether absent. On the other hand, the lymphocytes were in every case increased in absolute number, in one case to as many as 3,300 per c.mm. In the number of large mononuclear leucocytes no regular alteration was to be made out; the same was true of the red blood cells. It is to be remarked that a relation between the amount of the exposure to the rays and the degree of blood change was apparent to the extent that the case in which the exposure was greatest showed the most marked changes.

True Diverticula of the Lateral Wall of the Bladder.—Sugimura (Virchow's Archiv.) says that it is well known that the lateral vesical walls are the favorite sites for the occurrence of true diverticula. As a rule these lie above and to the outer side of the ureteral ostia. Englisch considers the neighborhood of the intramural course of the ureter as a rare but nevertheless characteristic situation of true diverticula.

When the walls of the diverticulum contain a well-developed muscular layer, then we are dealing with the true or congenital type.

As for the method of development of these pockets, one of three processes may be considered as obtaining in any given case.

1. The diverticulum may be completely preformed.
2. There may be a congenital malformation which only leads to pocket formation after many years of increasing vesical pressure through obstruction.
3. The bladder wall may be normal, or there may be simply muscular weakness which, under certain conditions (stone, pressure, etc.), leads to the formation of diverticula.

The author's case leads him to believe that he was dealing with one of the varieties in which a congenital malformation develops into a true diverticulum by virtue of mechanical causes.

Vaccines in Acne.

As the result of an extensive use of vaccines in acne the authors state that they have been compelled to form a very qualified estimate of their value. One cannot claim more for vaccine therapy in acne than that it is a useful adjuvant of the ordinary forms of treatment. Occasionally the condition will clear up remarkably under the vaccine, but there is a marked tendency to relapse, and it is usually necessary to continue the vaccine for long periods and to reinforce it with other measures.

The authors hold that vaccines should be reserved for selected cases, as follows: (1) Cases characterized by severe, deep-seated puslules, forming boil-like lesions, occupying a large area—the face and more or less of the chest and back; lesions in which micro-organisms are present in abundance, the staphylococcus greatly predominating, and the acne bacillus being difficult to find. (2) Cases in which the lesions are indolent and superficial, consisting chiefly of inflamed comedones which do not for the most part go beyond the papular stage, pustulation being slight and, so to speak, accidental. (3) Cases which combine the more severe and less severe lesions characteristic of the first and second groups.

For cases of the first group a staphylococcus vaccine may be used with advantage, but it must be administered over a period of some months. In cases of the second group the authors have found an acne bacillus vaccine to give good results in a reasonably large proportion of instances. In cases of the third group mixed vaccines of staphylococcus and acne bacillus are indicated.

In all instances attention must be paid to the other etiological factors, such as the rapid development of certain glands with the advent of puberty, and the plugging of the ducts, reflex circulatory disturbance due to nervous strain resulting from the changes of adolescence, digestive disorders, and the formation of intestinal toxins. Chronic constipation must be corrected, and the diet and mode of life regulated.

In regard to local measures, if suppuration has not occurred the comedones should be squeezed out and the part washed with soap and water frequently and energetically; if the suppurative stage has been reached, the pustules should be punctured or incised, bathed with hot water, and dressed antiseptically; the skin should be disinfected, and, in all cases of acne of the body, reinfection should be guarded against by frequent changes of the garment worn next the affected part. Other valuable measures are the X-rays and radium. To the former the severesr cases will yield if the treatment is sufficiently prolonged; the latter is of value for indurated nodules.

The authors agree with those who hold that autogenous vaccines are more efficacious than stock vaccines, though in cases of the second group mentioned above they think it is better, perhaps, to use a stock vaccine from a trustworthy source, owing to the difficulty of cultivating the acne bacillus. They obtained best results in cases of this group with a stock vaccine of from 5 to 10 millions, given every week or ten days. If the cultivation of the bacillus be attempted, they find it advisable to inoculate not only the special media on which the bacillus will ordinarily grow, viz., acid agar, glucose agar (anaerobically). and oleic acid agar, but also human-blood agar and Loffler's blood-serum. Pus containing the bacillus should not be allowed to become dry, as this frequently kills the organism. The authors consider that control of the vaccine treatment by means of the opsonic index is of little importance and may be disregarded.—Malcolm Morris and Ernest Dore, British Journal of Dermatology.

Charlotte Medical Journal

Published Monthly.

EDWARD C. REGISTER, M. D., EDITOR

CHARLOTTE, N. C.

THE UNDIMINISHED DEATH RATE FROM PUERPERAL SEPSIS IN PRIVATE PRACTICE.

As president of the Obstetrical Society of London, in 1898, Dr. Cullingworth expressed the opinion that there is no obstetrical or gynecological subject that can compare in importance with the question of undiminished death rate from puerperal fever.

With the establishment of maternity hospitals, notably those of Paris and Vienna, the ravages of puerperal sepsis became so appalling that public sentiment was aroused and a demand was created for the closure of these institutions. The death rate ran as high as 10 to 15 per cent. until Semmelweis, Pasteur, Lister, and Wendell Holmes made known the essential cause and the mean of prevention of puerperal sepsis. No sooner had the profession in general adopted the suggestions of these men than the mortality was rapidly lowered to a fraction of one per cent. Such was the experience in maternity hospitals, but in private practice the results were by no means so encouraging.

I quote Lea, of Manchester, England, who says: "Indeed it is not too much to state that in hospitals and in the private practice of surgeons, septic infection has been almost entirely abolished, but this, unfortunately, cannot be said of obstetric practice in general."

Byers, in his address to the Carlisle Medical Society, said: "It is, indeed, a terrible blot upon our obstetric art that, while within the memory of many of us puerperal fever has been banished from maternities in which formerly it was so prevalent, the same good results have not followed in general practice."

Williams says that "in private practice it is doubtful whether the results are better today than they were before the introduction of antiseptic methods, for the reason that the doctrines of asepsis have not yet permeated the rank and file of medical men, much less of midwives, to whose care is committed a very large proportion of obstetrical cases."

Playfair writes: "It is a painful, and not very creditable fact, that the mortality from puerperal septic disease has not diminished in private practice as it has in public institutions."

Clarence Webster says: "As regards private practice, it is doubtful if there has been much diminution in mortality, either in Europe or America." Boxall finds the death rate about the same in the English countries as it was before the antiseptic era.

Boxall and Byers assert that the death rate in England from this preventable disease is as high and possibly higher in private practice now than it was twenty and even forty years ago.

A study of the records of maternities shows that in nearly every instance of death from sepsis the cases were either delivered in their homes or there had been more or less interference before entering the institution.

In the continental countries from 60 to 80 per cent. of women are delivered by midwives. This is undoubtedly a prime factor in the causation of puerperal sepsis. But it is apparent that puerperal sepsis is yet too prevalent in the hands of medical men. Allowing for unfavorable conditions in the home, which are not under the control of the physician, there are many factors which contribute to septic infection which the physician often disregards. The physician is often first called when labor is in progress and finds an ignorant and meddlesome woman who has already worked mischief. The house may be poorly ventilated, the patient dirty, the linen soiled. The labor is terminated as best it may and the parturient proceeds with her puerperium under equally unfavorable conditions. A fearful handicap to the physician in private practice!

But we will look, for a moment, to causes of puerperal mortality and morbidity which are clearly chargeable to the physician.

We will mention inadequate disinfection of the hands, instruments and field of operation, and the introduction of anesthesia into obstetric practice which has encouraged operative interference to an unwarranted degree. It is estimated that 40% of puerperal sepsis occurs in cases where there has been some operative interference. Finally, will be mentioned, the habit of making repeated vaginal examinations which can serve no better purpose than to satisfy the curiosity of the physician. These are not all, but they are the chief factors which account for the relatively high percentage of mortality and morbidity in private practice.

Is it not a serious indictment against the general practitioner who through ignorance or indifference fails to safeguard his obstetric patients by means which are so clearly at his disposal?

THE COMPLIMENT FIXATION TEST IN THE DIAGNOSIS OF GONORRHEAL INFECTION.

We are indebted to Mueller and Oppenheim for what may prove a valuable diagnostic test of gonorrheal infections, particularly in obscure cases which may readily be confused with similar affections due to other causes.

Schwartz has lately contributed to the subject (Am. Jour. of Med. Sciences, May, 1911). He draws his conclusions from a study of a series of 324 cases. For details in technic the reader is referred to this noteworthy contribution. Certain facts of interest are evolved from these experiments. First of all it is demonstrated that there are at least twelve different strains of gonococci which present widely differing characteristics, and the conclusion is drawn that the serum of a patient infected with one strain of the gonococcus might only fix compliment in the presence of an antigen of the same strain.

In order to simplify the method and to make its application of greater practical value Schwartz and McNeil conceived the idea of compounding a mixed antigen from several of the separate strains. In this they have succeeded. Strong positive results were obtained from the antigen from the mixture of several strains. From nine to twelve different strains were used at various times. The value of the test, from a negative point of view, is not yet determined, *i.e.*, we are not as yet able to determine by this method that a patient has been cured or that she has no possible traces of an infection remaining.

The significance of a positive reaction in the so-called clinically cured cases of gonorrhea seems to be that, though clinically they are cured, there exist foci of living gonococci somewhere in the body. Hence the assumption that such individuals are still capable of conveying an infection.

THE OWENS' BILL AND THE LEAGUE FOR MEDICAL FREEDOM.

The so-called "League for Medical Freedom" recently has been displaying pernicious activity and, through the public prints, has been much in the public eye. This organization, composed of practitioners of various crafts related more or less remotely to the art of medicine, such as food adulterators, nostrum vendors, osteopaths, chiropaths, Christian scientists, and,—for aught the writer knows to the contrary—spiritualists, is violent in its opposition to the pending Owens' bill. Its utterances are filled with mis statements, and real facts are so perverted as to prejudice unduly the public mind and lead the casual thinker to conclude that the Owens' bill is fraught with danger, not only to the aggregation above mentioned, but to the public at large. Now, the sole object of the Owens' bill is to consolidate under one head the bureaus of the various departments of the general government doing hygienic work, which work, as at present performed, lacks careful delimitations and, sometimes, unity. These bureaus, chiefly, are the Marine Hospital and Public Health Service, now under supervision of the Treasury Department, and the Division of Chemistry, which is a bureau of the Department of Agriculture.

The opposition claims that the hidden and sinister purpose of this bill is to create a medical oligarchy, by securing governmental endorsement and sanction of a single school of medicine, which it is pleased to denominate "Allopathy." Inasmuch as the Owens' bill makes not the slightest pretense at interferring with the regulation of the practice of medicine as now enforced by the various States, and as it is difficult to see how this function can be usurped by the general government, the loud cries of "injustice" would seem to be raised for the purpose of creating prejudice rather than for correcting it. Principally, the plaint of the "League" is that its various sects are unjustly discriminated against in that they are not allowed full license to pursue their activities without restraint. The plea applies with equal force and justice to the fake mine share seller, and get-rich-quick schemers generally. Certain of our States undertake to determine the qualifications of plumbers, undertakers, pilots, horseshoers—why not of osteopaths? Followers of these cults in reality wish to practice medicine—for none of these practices have any well defined bounds—without undergoing proper educational preparation therefor. None of our States prohibits the practice of osteopathy, massage or Christian science. This point the public usually overlooks. Simply the States set up qualifications that must be attained by the would-be practitioner, and the benighted mortals cited fail to see therein their own conservation. Isn't it reasonable to suppose that an osteopath who has obtained a creditable medical diploma is preferable to one who has come by his calling, God knows how? But can the League cite a single physician who has ever abandoned his faith for that of the cults? I should like to have such name!

Recently in a public address, a Mississippi Congressman proclaimed his violent opposition to the pending bill, "Until, at least, there is some semblance of unity amid the chaotic ideas of doctors and schools of medicine."

The writer, in reply, deplored the speaker's limitations as applied to the subject. Could the speaker, he asked, name two schools of physiology—could, even, he name two physiologists whose ideas, save in minute points, were diametrically opposed? Had he ever heard of any opposing sects in anatomy? Were there schools of pathology whose teachings presented more than pleasing variations? Were there opposed systems of chemistry—of obstetrics? Could he name any gynecological sects or schools? In point of fact, was there as much division in medical ranks, as in the ranks of congress, of statesmanship, of religions, of the fine arts?

It will be, indeed, a dreary and monotonous world when no opposing views prevail, when all opinion is at one; for there will be no further search for truth.

Let us keep before us the facts as to the purport of the Owens' bill and let us promulgate this truth among the laity. Further, let us enlist the active support of our Senators and Representatives in favor of this wise and economic measure. K.

GENERAL IMMUNITY TO GONORRHEAL INFECTION.

General immunity to gonorrheal infection does not exist. Certain tissues, notably gland tissues, appear to be immune. Local immunity in certain tissues, notably the mucosa of the urethra, may exist for a brief time; however, this fact is not fully established. Bumms' observations in gonorrheal endometritis are pertinent to the question. He observed localized metaplastic areas in the endometrium in which gonococci were found while the surrounding cylindrical cells were germ free. He, therefore, reasoned that these cylindrical cells had acquired immunity to the gonococcus. Jadassohn believes this to be the explanation for spontaneous healing of local gonorrheal infections.

Unfortunately, as Herff puts it, this local immunity exists for a short time. A second infection may soon follow the first. The immunity exists only so long as the tissues are under the direct influence of the gonotoxines or the gonococci.

Wassermann, Jullien, Maslovski and de Christmas hold that there is no immunity in gonorrhea. That there is an acquired immunity there can be no doubt, yet examples are not rare in which a second infection has followed closely upon the first. Congenital immunity has been observed, but such instances are rare.

The great majority of infections in the female is conveyed from chronic gonorrhea in the male.

Prior to the discovery of the gonococcus it was not possible to say, with assurance, that a latent infection did or did not exist in the urethra, for the reason that the now well established fact that gonococci may exist in the absence of a discharge, or may not exist in the presence of a purulent discharge, was not then known. Noeggerath was the first to appreciate the great chronicity of the disease, and, while he was extravagant in the expression that the disease usually lasts a lifetime, he cannot be said to have been far wrong. Noeggerath allowed of only 10 per cent. of cures of gonorrhea of the male urethra. Bumm gives a much larger percentage, but will not venture a positive statement. He has found gonococci in the urine and in the secretions five and ten years after the onset of the infection.

Referring to the virulence of gonococci we find much difference of opinion. Bumm does not seem to believe in varying degrees of virulence of gonococci. He opines that the severity of the infection depends upon the location; that in the cervix and urethra the activity of the germs is slight and in the upper genital tract it is relatively great. Doederlein, on the other hand, stands emphatically for varying degrees of virulence in gonococci. He says that acute infections beget acute infections and subacute and chronic infections beget subacute and chronic infections. My own clinical observations are in accord with those of Doederlein.

The gonococcus may retain its virulence for years upon such mucous surfaces as that of the cervix and urethra, but in the depth of tissues and in such closed spaces as pus tubes, Bartholinean abscesses and ovarian abscesses, it early looses its virulence.

All attempts at inoculating animals with the gonococcus have failed, with the possible exception of that of Wertheim who succeeded in creating a peritonitis in mice, rabbits, and guinea pigs by inoculating with pure culture of the gonococcus. Such authorities as Finger, Heimann, Grosz, and Kraus have not been able to verify the experiments of Wertheim. The urethra and conjunctiva, which are so susceptible to infection in the human species, are totally resistant in animals.

On the contrary certain animals are very susceptible to the influences of gonotoxin—this is notably true of the guinea pig which, according to de Christmas, can be killed by an intracerebellar injection of 0.001 ccm. Subcutaneous injections of gonotoxin produce a local irritation which may go on to necrosis. The mucous membranes of all animals are not affected by gonotoxin. De Christmas has been able to create immunity in animals to gonotoxin by subcutaneous injections.

Experiments upon men with gonotoxin have been carried out by de Christmas, Grosz and Kraus and by Schaffer. It was observed that a purulent urethritis could be created by the direct application of gonotoxin to the urethral mucosa and that the inflammatory reaction subsided in 24-48 hours. As yet the attempt to immunize men by injections of gonotoxin has failed.

THE SURGICAL TREATMENT OF PUERPERAL THROMBO-PHLEBITIS.

Heretofore the profession has been able to do little or nothing for puerperal thrombophlebitis and the resultant pyemia. The treatment largely resolved itself in an endeavor to increase the resistance of the patient. Now we are encouraged to believe that the mortality of this dreaded disease may be materially lowered by the timely ligation of the veins leading from the primary field of infection.

For years the aural surgeons were ligating the jugular vein to check the advance of infected thrombi when W. A. Freund, in 1897, ligated the spermatic veins of two cases of puerperal thrombo-phlebitis but without success. Five years later Trendelenberg operated five cases with one recovery. His low percentage of recoveries can be accounted for by the fact that four of them were operated in the acute stage; the one operated 26 days after delivery recovered.

Bumm, in 1905, published his results in five cases of chronic pyemia. Of this number three recovered. This report gave an impetus to the proceedure. Since then Fromme, Cuff, Latzke, Whitridge Williams, Lenhartz, Opitz, Osterlow, Vineberg and others have reported cases. About 65 cases are now on record with a mortality of 38 to 40 per cent. Many of the cases resulting in death should not have been operated because the disease had progressed beyond the point of ligature. In several the infected thrombi were found in the inferior vena cava. Again there were those operated in which the lymphatic invasion was well advanced, leaving nothing to be gained by ligating the veins. It is noted that in many operated cases which ended fatally the surgeon failed to ligate all of the thrombosed veins and as a result the infection continued to spread.

If the time should come when we will be in possession of accurate clinical means of recognizing the exact limitations of puerperal infections much will be gained by the timely ligature of veins in advance of infected thrombi.

As suggested above the great difficulty in the management of puerperal thrombophlebitis lies in our failure to recognize the extent of the involvement, hence the frequency with which the thrombosis has extended beyond the point where the veins can be safely ligated.

It may be fairly stated that the mortality of chronic pyemia has been lowered fully 10 per cent. by the timely ligation of infected veins. I confidently look for greater improvement in results as we acquire the ability to recognize conditions before the disease has too far advanced. We are admonished by Trendelenberg and Bucura to operate after the fourth chill. It is questionable if this is a safe rule of practice, inasmuch as many cases are known to recover without operation after a dozen or more chills.

The operation is clearly contra-indicated where metastatic abscesses are recognized; where pus has accumulated in the pelvis and where there is distinct evidences of lymphatic invasion.

Pneumonia and endocarditis are placed as contra indications to the operation, while pleurisy and lung infarcts do not necessarily contra-indicate operative interference. Where there is marked œdema of the leg it is assumed that the common iliac vein is thrombosed—such cases are not looked upon as favorable for operation. Unfortunately the bacteriological examination of the blood is of very little assistance in determining the indications for operation. Recovery is possible in the presence of bacteriæmia and death may ensue in the absence of micro-organisms in the blood. It is the rule that the blood seldom contains a large number of germs and that these are not constant in their presence. Hence it follows that blood findings are of little value in determining the prognosis or the question of operative interference.

It is proposed to approach the veins by one of three routes—the vaginal, extraperitoneal and intra-peritoneal. The latter route is in general favor because it permits of inspection of a wider field.

EDITORIAL NEWS ITEMS.

Minutes of the Tri-State Medical Association of the Carolinas and Virginia, held at Columbia, S. C., February 21-22, 1912.

WEDNESDAY, FEBRUARY 21.

Called to order by Dr. James H. McIntosh, of Columbia, Chairman Committee of Arrangements.

Divine Invocation—Dr. C. E. Burts, Pastor First Baptist Church, Columbia.

Address of Welcome—Hon. Wade Hampton Gibbes, Mayor of Columbia. .

Address of Welcome on part of the Profession—Dr. H. W. Rice, President Columbia Medical Society.

Response—Dr. Robert C. Bryan, Richmond, Va.

Session formally opened by Dr. McIntosh, and President, Dr. J. Howell Way, of Waynesville, N. C., presented to the Society.

Address by the President.

A committee appointed to report on the President's address, and request by several that the President's address be given to the general press.

The following papers read and discussed:

"Some Clinical and Experimental Observations Concerning Protoclysis"—Dr. Hugh H. Trout, Roanoke, Va.

Discussed by Doctors Minor and Carroll, of Asheville.

"The Significance of Rectal Bleeding"—Dr. E. H. Terrell, Richmond, Va.

Discussed by Doctor Guerry.

Upon motion of Dr. Guerry, the members of the Columbia Medical Society, not members of the Tri-State, and all visiting physicians, accorded the privileges of the floor.

"The Surgical Treatment of Gastro-Intestinal Poisoning"—Dr. A. B. Knowlton, Columbia, S. C.

"One of the Fifty-Seven Varieties of Operation for Retro-Displacements"—Dr. A. Murat Willis, Richmond, Va.

"Safeguarding and Lessening the Disagreeable Features of Surgical Operations"—Dr. Southgate Leigh, Norfolk, Va.

Discussed by Doctors Stuart McGuire, Guerry, Minor, Gil Wylie, J. T. Burrus.

"Some Practical Points in the Management of Appendicitis"—Dr. Robert L. Gibbon, Charlotte, N. C.

"Unrecognized Appendicitis"—Dr. J. E. Rawls, Suffolk, Va.

Discussed by Doctors Williams, Hodges, Timmerman, Graham, Horsley, Gray, Glenn, R. L. Payne, Jr., A. E. Baker.

"Intussusception of the Ileum in Infants and Children"—Dr. J. Shelton Horsley, Richmond, Va.

"Surgical Treatment of Pancreatitis, Both Immediate and Remote"—Dr. J. F. Highsmith, Fayetteville, N. C.

"Result of Different Methods in the Treatment of Syphilis of the Nervous System in the last Fifty Cases"—Dr. J. Allison Hodges, Richmond, Va.

Discussed by Doctors Crowell and Williams.

"Some Practical Conclusions as to the Cause of the Increased Death Rate Above the Age of Forty"—Dr. J. C. Walton, Richmond, Va.

Discussed by Doctors Albert Anderson, Minor, Williams, Henry Page.

"The Clinical Value of the Polygraph, Personal Observations"—Dr. Philip Roy, Washington, D. C.

"Some Observations on Arthritis Deformans"—Dr. William P. Matthews, Richmond, Va.

Discussed by Drs. Walton, Hodges, Hayes, Taylor.

READ BY TITLE.

"Quinine and Urea-Hydrochloride, Local Anaesthetic in Rectal Operations, With Report of Cases"—Dr. Chas. V. Carrington, Richmond, Va.

"Rupture of the Uterus During Labor"—Dr. Charles R. Robins, Richmond, Va.

"The Treatment of Tubal Infections"—Dr. John E. Canaday, Charleston, West Va.

"The Watkins Operation and Modification in Procidentia and Retro-Positions of Uterus"—Dr. Charles M. Strong, Charlotte, N. C.

"The Cystoscope as an Aid in Gynecological Diagnosis"—Dr. C. A. Woodard, Durham, N. C.

"The Value of Differential Blood-Count in Surgery"—Dr. A. E. Baker, Charleston, S. C.

"A Safe, Simple and Efficient Operation for Partial and Complete Prolapse of the Uterus after the Method of Dr. Dudley"—Dr. Chas. M. Reese, Charleston. S. C.

"The Indications for Operation in Myoma of Uterus"—Dr. J. Ernest Stokes, Salisbury, N. C.

"Etiology and Treatment of Dysmenorrhoea"—Dr. J. T. Burrus, High Point, N. C.

"Our Duty to Our Patients From a Surgical Standpoint"—Dr. A. Barnes Hooe, Washington, D. C.

"The Negro as a Surgical Subject"—Dr. Lucien Loften, Emporia, Va.

"Early Diagnosis of Carcinoma"—Dr. F. T. Meriwether, Asheville, N. C.

"Pseudo Cyst of Pancreas with Report of Case"—Dr. Stuart McGuire, Richmond, Virginia.

"Sacro-Iliac Relaxation and Dislocation"—Dr. Michael Hoke, Atlanta, Ga.

"The Bismuth Meal of Handek as an Aid in Diagnosis of Gastric Ulcer"—Dr. W. O. Nisbet, Charlotte, N. C.

"The General Application of Diet Based Upon the Advanced Physiology"—Dr. A. W. Calloway, Asheville, N. C.

"Sociologic Aspect of Drunkenness, Duty of State"—Dr. Stephen Harnsberger, Catlett, Va.

"Diseases and Degenerations Due Directly to Alcohol"—Dr. T. D. Crothers, Hartford, Conn.

"Clinical Significance of Tachycardia or

Swift Heart"—Dr. Alexander G. Brown, Richmond, Va.

THURSDAY, FEBRUARY 22.

The following papers read:

"Hypertrophied Thymus and the Status Lymphaticus with Report of Cases"—Dr. J. H. Taylor, Columbia, S. C.

"The Recognition and Treatment of Thyroid Disease"—Dr. Jno. Rogers, New York, N. Y.

Discussed by Doctors Jervey, Williams, Roy, Hayes, Fillmore Moore, Monroe, Carpenter, Walton, Stuart McGuire, Gray, Taylor, Weaver.

"On Psychic Disorders Consecutive to Injury—Pathogenesis and Treatment"—Dr. Tom A. Williams, Washington, D. C.

"Diagnostic Points on Three Common Forms of Paralysis in Children"—Dr. J. P. Monroe, Charlotte, N. C.

"Psychic Hardening"—Dr. R. S. Carroll, Asheville, N. C.

"Certain Problems and Procedures as to Surgery of the Central Nervous System"—Dr. Charles H. Frazier, Philadelphia. Penn.

Discussed by Doctors Williams, Munroe, Carroll, Hodges.

Report by Dr. Leigh, Chairman Cancer Committee. Bulletins have been gotten out by Virginia and South Carolina.

"Home Treatment versus Climatic in the Treatment of Tuberculosis"—Dr. Carl V. Reynolds, Asheville, N. C.

"The Diagnosis of Early Tuberculosis by X-Ray"—Dr. A. L. Gray, Richmond, Va.

"Physical Signs of Pulmonary Tuberculosis Caused by Nasal Hypertrophy"—Dr. Mary E. Lapham, Highlands, N. C.

"The Advisory Part of Our Treatment of Tuberculosis"—Dr. Clyde E. Cotten, Black Mountain, N C.

"Specific Medication in Tuberculosis; Its Development; Its Treatment; Its Aims and Results"—Dr. H. B. Weaver, Asheville, N. C.

"Tuberculosis of the Tongue"—Dr. Silvio Von Ruck, Asheville, N. C.

Discussed by Doctors Talley, Coward, Roy, Dunn.

"Cancrum Oris, Complicating Typhoid"—Drs. Jno. S. Clifford and Baxter S. Moore, Charlotte, N. C.

"The Value of the Cystoscope in Surgical Diseases of the Kidneys"—Dr. F. Webb Griffith, Asheville, N. C.

Discussed by Doctors Crowell and Graham.

"Ainhum; Report of a Case"—Dr. Jas. K. Hall, Richmond, Va.

"Tuberculosis, How to Combat It"—Dr. Charles A. Julian, Thomasville, N. C.

"Elimination and its Importance in the Treatment of Pulmonary Tuberculosis"—Dr. I. J. Archer, Black Mountain, N. C.

THURSDAY, FEBRUARY 22, 10 A. M.

The following papers read by title:

"Gall Stones Complicating Pregnancy and the Puerperium; Report of Six Cases"—Dr. Joseph Graham, Durham, N. C.

"Diphtheria Carriers"—Dr. Henry Page, Fort Moultrie, Moultrieville, S. C.

Discussed by Dr. Coward.

"Prevention of Imbecility, Crime and Pauperism—the Paramount Duty of State"—Dr. Ira M. Hardy, Washington, N. C.

Discussed by Doctors Morse, Taylor, Munroe, McBrayer, Page, Anderson.

"Treatment of Typhoid"—Dr. J. S. Brown, Hendersonville, N. C.

"The Pseudo-Malarial Types of Acute and Chronic Pyelitis"—Dr. Douglas Vanderhoof, Richmond, Va.

"The Diagnosis of Surgical Conditions of the Ureter by Means of the X-Ray"—Dr. Daniel D. Talley, Jr., Richmond, Va.

"Pyelitis"—Dr. Robert C. Bryan, Richmond, Va.

"Modern Methods of Diagnosis in Urinary Surgery"—Dr. Henry G. Bugbee, New York City.

"Report of Twenty-Three Consecutive Prostatectomies"—Dr. Lawrence T. Price, Richmond, Va.

"Observations on Surgery of the Kidney"—Dr. H. A. Royster, Raleigh, N. C.

"The Uterus as a Retention Cyst"—Dr. Morris M. Caldwell, Wilmington, N. C.

"Nausea of Pregnancy"—Dr. John N. Upshur, Richmond, Va.

"Remarks on 690 Labor Cases with one Maternal Death"—Dr. Virginius Harrison, Richmond, Va.

"How May we Reduce the Morbidity and Mortality Incident to Pregnancy and Childbirth?"—Dr. B. B. Steedly, Spartanburg, S. C., and Dr. J. G. Pittman, Gaffney, S. C.

"The Conservative Obstetrician"—Dr. A. B. Croom, Maxton, N. C.

"Obstetrics from a Rural Standpoint"—Dr. G. T. Sikes, Grissom, N. C.

"Puerperal Eclampsia; Suggestions on Treatment"—Dr. D. A. Stanton, High Point, N. C.

"Result of Neglected Lacerations of the Uterus and Vagina"—Dr. Jno. A. Williams, Greensboro, N. C.

"Some Effects of Negligence in Country Practice"—Dr. T. I. Fox, Franklinville, N. C.

"A Plea for Early or Primary Repair of the Perineum"—Dr. W. O. Spencer, Winston-Salem, N. C.

"Prevention of Puerperal Infection in Private Practice"—Dr. W. W. McKenzie, Salisbury, N. C.

"Some Pschyic and Physiological Aspects of Pregnancy and Labor"—Dr. W. J. McAnnaly, High Point, N. C.

"Toxaemia of Pregnancy"—Dr. H. B. Hiatt, Asheboro, N. C.

"Puerperal Septicaemia"—Dr. Thos. E. Anderson, Statesville, N. C.

"Diet and Prevention in Pregnancy"—Dr. Fillmore Moore, Aiken, S. C.

"The Retinitis Albuminurica of Pregnancy"—Dr. E. Reid Russell, Asheville, N. C.

"Chronic Nasal Diphtheria"—Dr, Clifton M. Miller, Richmond, Va. (Presented as a Candidate's Thesis to American Laryngological, Rhinological and Otological Society and read by permission of Society).

"The Contagium and Contagiousness of Scarlet Fever"—Dr. L. B. McBrayer, Asheville, N. C.

"Sinus Thrombosis, Report of a Case of the Cavernous Sinus"—Dr. Eugene B. Glenn, Asheville, N. C.

"The Effort to Fuse Images, a Source of Headache and Mental Discomfort"—Dr. W. E. Driver, Norfolk, Va.

"A Remarkable Case of Nasal Polypus, with Illustrations"—Dr. J. W. Jervey, Greenville, S. C.

"Why we do not Relieve Deafness Where There is no Apparent Cause"—Dr. E. M. Whaley, Columbia, S. C.

"Orbital Complications and Diseases of the Nasal Accessory Sinuses"—Dr. A. M. Whisnant, Charlotte, N. C.

"Prescribing of Glasses. How and by Whom it Should be Done"—Dr. Chas. W. Kollock, Charleston, S. C.

"Report of a Rare Tumor of Neck and Face"—Dr. E. T. Dickinson, Wilson, N. C.

"Another Plea for the Early Diagnosis and Operative Treatment of Ectopic Gestation"—Dr. Owen Smith, Asheville, N. C.

"The Skin: Acne and Acneiform Diseases"—Dr. Paul Paquin, Asheville, N. C.

"Treatment of Pneumonia"—Dr. H. L. Monk, Spencer, N. C.

The following officers were elected:

President, Dr. A. E. Baker, Charleston, S. C.

Vice-President, Dr. A. B. Knowlton, Columbia, S. C.

NEW MEMBERS OF EXECUEIVE COUNCIL.

Dr. A. J. Crowell, Charlotte, N. C.

Dr. A. L. Gray, Richmond, Va.

R. B. Epting, Greenwood, S. C.

Southgate Leigh, Norfolk, Va.

Place of meeting, Norfolk, Va.

A vote of thanks was extended the Columbia Medical Society, the hotels, and the newspapers, for their many kindnesses during the meeting.

ENTERTAINMENTS.

Reception at the residence of Dr. Knowlton, on Wednesday night; Smoker at the Metropolitan Club on Thursday night, by the Columbia Medical Society.

BOOK NOTICES.

Health and Medical Inspection of School Children. By Walter S. Cornell, M. D., Director of Medical Inspection of Public Schools, Philadelphia; Lecturer on Child Hygiene, University of Pennsylvania; Director of Division of Medical Research, New Jersey Training School for the Feeble-Minded, etc. Illustrated with 200 half-tone and line engravings. many of them original. Philadelphia: F. A. Davis Co., Publishers, 1912. Price $3.00.

The purpose of this book is to present a practical exposition of the work of medical inspection, born of the examination of some 35,000 children, and to give to physicians and teachers a survey of medical practice as it relates to children of school age. The author, in the arrangement and character of his illustration, presents his sub?ect in a most interesting manner.

A review of the work of medical inspection in different localities is not attempted. Only general information on the treatment of diseases and defects is given.

The contents of this book are discussed under the following general headings:

Medical Inspection, Hygiene, Defects and Diseases, The Eye, The Nose and Throat, The Ear, The Teeth, The Nervous System, Mental Deficiency, The Skeleton, Nutrition, The Skin, Speech, Infectious Diseases, Prevalence of Defects and Diseases.

The volume contains 614 pages of reading matter, is carefully indexed and attractively bound.

A Compound of Genito-Urinary Diseases and Syphilis Including their Surgery and Treatment. By Charles S. Hirsch, M.D., Formerly Assistant in the Genito Urinary Surgical Department, Jefferson Medical College Hospital; Consulting Physician, Social Service Hospital and Juvenile Protective Association, Philadelphia. Second Edition. With 74 illustrations. Philadelphia: P. Blakiston's Son & Co. 1912. Price $1.26.

In this edition the author has carefully revised the entire manuscript, and has anded a large amount of new matter.

The book is now thoroughly adaptable for the use of students, and for reference by the practitioner. A great many new cuts have been added. In the addition of the new matter the author has been very careful in his selection of such matter that would bring this text up-to-date in every sense of the word.

We take great pleasure in recommending this work to our readers.

Practical Electro-Therapeutics and X-Ray Therapy. With Chapters on Phototherapy, X-Ray in Eye Surgery, X-Ray in Dentistry, and Medico-Legal Aspect of the X-Ray. By J. M. Martin, M. D., Professor of Electro-Therapeutics and X-Ray Methods in the Medical Department of Baylor University, in the Medical Department of Southwestern University, and in the State Dental College, Dallas, Tex.; Member of the Texas State Medical Association, American Medical Association, American Rontgen X-Ray Society, etc. Containing 219 Illustrations. St. Louis: C. V. Mosby Co. 1912.

This book has been written for the medical student and general practitioner, with the hope that a deeper interest will be awakened among the readers, in the use of electricity and x-ray by showing what may be done by a thorough study and careful application of the methods presented. No attempt has been made to treat any subject exhaustively, but sufficient matter has been presented to convince the most skeptical.

Many helpful illustrations are inserted in this volume, and the appearance of the book from the publisher's standpoint is quite attractive.

A Text-Book of Materia Medica for Nurses. Including Therapeutics and Toxicology. By George P. Paul, M. D , Town Health Officer, Round Lake, N. Y.; Sometime Visiting Physician to the Samaritan Hospital at Troy, N. Y. Second Edition, Thoroughly Revised. Price $1.00 net. Philadelphia and London: W. B. Saunders Co. 1911.

In the revision of this work, the author has successfully gone over his manuscript with the view of making this book one of practical use to trained nurses. The additions to this volume are particularly along the lines of Practical Therapeutics. The volume is attractive in appearance, and in every sense of the word "good." It will be found of immense value to the nurse.

The Practical Modicine Series. Comprising Ten Volumes on the Year's Progress in Medicine and Surgery. Under the General Editorial Charge of Gustavus P. Head, M.D., and Charles L. Mix, A.M., M.D. Volume II. Skin and Venereal Diseases, Miscellaneous Topics. Edited by W. L. Baum, M.D., and Harold N. Mayer, M.D. Series 1911. Chicago: The Year Book, Publishers, 180 N. Dearborn St. Price $1.25.

We have pleasure in announcing that this, another volume of the Practical Medicine Series, is on sale. This volume is in keeping with the former volumes. It contains an immense amount of valuable information in a compact form.

The book is attractive in its make-up, and will prove of great value to the medical profession.

The Real Party Cleavage.

The real distinction at the present time in the Republican party is not so much between "progressives" and "conservatives" as between a coalition of selfish interests on one hand and the consistent Republican sentiment of the country on the other hand. The future of the Republican party must depend upon what will happen in the national convention next June. It is not a party seriously divided within itself. Nor is it a party that cannot easily be harmonized. The great mass of the party is for the country and the welfare of all the people. But the machinery of the party has to a great extent come under the control of self seekers and special interests. The party does not lack intelligence, and its best thinking is done, not by those holding the high political offices, but by the rank and file who have time to think and are free from the bias of personal ambition and the restraints imposed by political bargain and trade. There has never been a period in the party's history when it was so necessary for its salvation that its private members should assert themselves, control their own convention, repudiate machine bargains, make a simple, honest platform, and nominate candidates in response to such demand as the party may have indicated by the middle of June. It is complained that the movement for control of the Chicago convention rests unduly upon the selection by federal office-holders of the delegates from Southern States that will cast no Republican electoral votes in November. If the administration were not reckoning upon its control of delegates from Alaska, Porto Rico, the Philippines, Hawaii, and those Southern States that are always solidly Democratic,—so the Progressives declare,—it would have no assurance upon which to base its arrangements with local machines and organizations, like the New York County Committee and the Penrose following in Pennsylvania. The auti-Taft Republicans have been sharply criticizing the methods used to get "snap judgment" and secure delegates many months in advance of the convention. The Republican party is generous, and it can forgive many mistakes. But, these critics declare, the party does not like to be sandbagged, and it resents snap conventions and cut-and-dried schemes that disregard the will of the voters. The eighteen or twenty delegates elected in early February were all of this sort.—From "The Progress of the World," in the American Review of Reviews for March.

The Bookman

MARCH, 1912.

CHRONICLE AND COMMENT.

Pointed Paragraphs on Timely Matters of Literature and Life.

THE DRAMA

The Function of Dramatic Criticism. By Clayton Hamilton.

FICTION.

The Sea-Farmer. By Jack London.

SPECIAL ARTICLES.

Going to the Opera in Puerto Rico (illustrated). By Frederic C. Dean.

Mr. Pipp: Tourist (illustrated). By Louis Baury.

Some Representative English Story Tellers (illustrated). I. Joseph Conrad. By Frederic Taber Cooper.

The Mania for Hyperbolism. By Max Nordau.

Concerning Books in Books. By Edna Kenton.

The Short Story and the Reader. By George Jean Nathan.

The Central Idea and Some Recent Novels. By Frederic Taber Cooper.

REVIEWS OF IMPORTANT NEW BOOKS.

By Graham Berry, Algernon Tassin, George Middleton, and Philip G. Hubert.

FOUR BOOKS OF THE MONTH.

I. William Winter's Shakespeare on the Stage. By Graham Berry.

II. Kellogg Durland's The Romances of Today. By Algernon Tassin.

III. Tom L. Johnson's My Story. By George Middleton.

IV. Gerhardt Hauptmann's The Fool in Christ. By Philip G. Hubert, Jr.

VERSE.

Deathless. By Charles Hanson Towne.

The Deeper Note. By John Kendrick Bangs.

The Poet. By Wilberforce Jenkins.

BIBLIOGRAPHIES OF YOUNGER REPUTATIONS.

IV. Joseph Conrad. By Vincent Sanger.

THE BOOK MART.

DODD, MEAD & COMPANY,
Fourth Ave and 30th St., New York City.

Abstracts of the Leading articles of the month.

The Treatment of Flatulence.—Burnet, in The London Practitioner, says that in most cases the diet will have to be carefully chosen and somewhat restricted. A rather dry diet will be found to suit best in nearly all cases—little liquid being allowed with meals. This excludes all soups and broths at the beginning of a meal and allows of only a small quantity of fluid toward the close of the meal. What the special drink should be has to be decided in each particular case. Some will do best with plain water, others may require a little stimulant —alcohol in some form.

We have to consider carefully in these cases whether alcohol is necessary, and if so what form is best. If given it should be prescribed with caution, more especially in the case of women suffering from dyspepsia, for oftentimes the temptation to seek temporary relief by its means from discomfort and flatulent distention, and the lassitude accompanying these conditions, is very great. From such beginnings a dependence upon alcoholic stimulants sometimes becomes established. If alcohol has to be given the amount should be clearly defined and given with or just after meals. Effervescing waters are often forbidden, but in the writer's opinion, if taken in strictly limifed amount, they are helpful rather than otherwise, owing to the stimulus given by the gas they contain. The light white wines and clarets are of doubtful value, but sometimes a glass of dry sherry seems to aid digestion. Champagne is rarely required, but in some cases where there is much prostration it is useful for a time. Ales and stout are not as a rule well borne. No alcohol in any form should be given on an empty stomach.

Tea must be limited in quantity and must be freshly made. The stewed decoction called tea, so dear to the heart of the hospital out-patient, is a fruitful source of these digestive troubles and of the "spasms" so graphically described by the frequenters of hospital out-patient rooms. Distention and disturbances of digestion are not, however, by any means confined to the class of persons who come under treatment at hospitals, and as a source of flatulence the excessive use of tea amongst well-to-do people should be always borne in mind.

Animal food is, as a rule, best digested by these patients; it must be carefully selected and well, though plainly, cooked—under rather than overdone; tender beef and mutton, chicken and other birds, game and fresh white fish. Pork, veal, goose, duck, etc., should be forbidden. It will be often found best at first to limit the meat meals—luncheon and dinner—to practically one course, light tender meat and a little vegetable, with a biscuit and butter to follow. Much green vegetable will usually not be well borne, and what is given should be rubbed through a sieve—cooked as spinach is served. Often it is best to forbid potato for a time, and to substitute toast or second day's bread. Farinaceous foods have to be given carefully and the effect watched, but where digestion by the stomach is chiefly at fault starchy foods, as they are dealt with chiefly in the intestines, may be given in greater amount. The contrary holds goods where digestion goes on best in the stomach; then meats are most satisfactorily digested. Ripe fruits have to be taken in great moderation, and raw vegetables, salads, etc., are not usually allowable in the earlier stages.

Whether meat preponderates in the dietary or farinaceous foods, the absolute necessity for slow eating and complete mastication of all solids should be strongly and repeatedly impressed upon the patient. It is always well to ascertain the condition of the teeth, and not infrequently some repairs have to be carried out by the dentist before complete and comfortable mastication can be attained by the patient.

Nux vomica is one of the most useful remedies in these cases and it may be given in tincture, or in pill with a quarter of a grain of capsicum and a couple of grains of compound rhubarb pill. Bismuth is of use in many instances, with an alkali such as bicarbonate of sodium, and calumba or other bitter infusion. Salicin is not used so much as we believe it might be, and given in five or ten grain doses in water before meals is often very helpful. Pepsin seems distinctly indicated, but it is often disappointing, and at the best it must be looked upon more as a palliative than anything else. Pancreatin, too, does not give the relief in all cases that we should expect from it. Salicylate of sodium with liquor pepticus, nux vomica, and spirits of chloroform seems useful in a certain number of cases. Extract of malt given with or just after meals helps in those cases in which the digestion of starchy foods is obviously difficult. A few drops of dilute hydrochloric acid in water shortly after meals is often decidedly beneficial. In some cases iron and quinine seem to be indicated, and in some cases we prescribe them only to find how difficult it is to get them to agree, especially in the earlier stages. When improvement has set in they may be tried with more confidence. A pill which is often well borne consists of a grain of reduced iron, with extract of nux vomica, quinine, and pil. rhei comp. It acts as a tonic and also as a mild aperient. It may be varied by a grain of pepsin and a twentieth of a grain of arsenous acid in place of the quinine, and it is useful in anemic subjects. Calomel in very small fractional doses, given twice daily for a few days at a time, has often a very good effect, and where there is a sluggish action of the liver a grain or two of blue pill with the pill colocynth and hyoscyamus, or the compound rhubarb pill, should be given occasionally and followed, if necessary, by a mild saline in the morning, but anything like strong purgation should be avoided.

Where the distention is chiefly in the bowels salicylate of bismuth, beta naphthol, and salol, in cachet, give at least temporary relief.

Lavage is not usually needed in the cases we are considering, but where there is much accumulation of mucus it is very helpful by clearing the stomach and thus giving a fair start to other treatment.

In acute attacks of flatulence hot water, with aromatic spirits of ammonia and spirits of chloroform with perhaps a teaspoonful of brandy, often relieves the tension and spasm. Sometimes a drop or two of oil of cajuput in mucilage has a very good effect.

In cases in which it is possible for the patient to follow such advice we may recommend riding on horseback or traveling, sea-bathing for young subjects, or a voyage, as the best means for completing the cure and preventing a recurrence of the symptoms.

Mechanism and Treatment of Prolapsus Uteri.—Treub (Rev. de gyn.) believes that the most effective treatment of prolapsus uteri is that by a well fitting pessary. In speaking thus he means in all cases moderate prolapsus, when the uterus has not passed out of the vulva. The initial cause of prolapsus is generally a labor that has been followed by subinvolution, owing to the fact that the patient could not leave her work long enough to rest sufficiently. The vaginal wall slides downward under the pressure of the fetal head, even when there is no tearing of the perineum. When these injuries are not repaired the inevitable process of descent of the uterus begins. The bladder slides downward and then the weight of the contained urine aids in causing prolapse. Women of the working classes who are obliged to be on their feet a great deal, and to make severe efforts involving the abdominal muscles thus increase the trouble. If the uterus becomes retroverted descent is easy, and the uterus drags down the posterior vaginal wall. In some cases there must be also an abnormal relaxation of the ligaments and muscles supporting the uterus. The treatment of this condition is replacement of the uterus in a normal position and its maintenance with a properly fitting pessary. Practitioners who are unable to retain such prolapsus by means of a pessary do not know what kind to use or how to fit it. The author uses hard rubber rings, and circular plates perforated with holes, the pessary of Prochownik. The soft rubber rings produce a bad smelling discharge and should not be used. The only difficulty is to choose the right size of pessary to retain the uterus without putting the vagina too much on the stretch. It should be removed once in three months, and a douohe should be taken every day. Suspension of the uterus by hysteropexy is not a good treatment of prolapsus, since it places the uterus in an abnormal position, and renders pregnancy undesirable and delivery impossible. This operation causes loss of blood, and is not without danger. Recurrence is possible and the repair of the perineum may cause the vagina to be so contracted as to cause difficulty in coitus.

Uterosclerosis and Sclerosis of the Rectouterovesical Fascia.—Oliver (Edin. Med. Jour.) says that uterosclerosis or uterofibrosis is characterized by an overgrowth of the connective tissue of the muscular stracture of the uterus. There is a marked increase, it may be in the connective tissue between fibers, but at all events in the connective tissue between bundles, with a correlative atrophy of the muscular elements, and consequently there may or may not be any very tangible increase in the bulk of the uterus. The atrophy of the muscular elements is in all probability secondary to the connective overgrowth. This disorder may make its appearance at any time during the reproductive life, but is most commonly observed between the ages of thirty-five and forty-five. Sooner or later the sclerotic change involves also the fibrocellular tissue of the cervix. The chief symptom is metrorrhagia, but occasionally the change going on in the uterus inhibits the menstrual function and amenorrheic periods of five or six weeks are occasionally observed. In consequence of the defective muscularity of the uterus clotting of the blood may take place in the cavity of the uterus, and more or less organized blood clots are often expelled, and these products are apt to be viewed as remnants of a conception. The derangement is a true fibrosis, and does not appear in any way to be inflammatory in character. It may make its appearance many years after a full-time parturition or an early abortion, but the writer has been unable to associate the disorder with any septic agency occurring in connection with a full time confinement or an abortion. Sclerosis of the rectouterovesical fascia is commonly a cause of infertility and even of sterility, as well as a not infrequent cause of dyspareunia. It resembles the disease known as Dupuytren's contraction of the palmar fascia. Sometimes the fascia is more or less thickened and contracted merely, but often it presents nodulations. It is not an inflammatory change, and it seldom, if ever, involves the mucous membrane of the vagina. The fibrous tissue causing the contraction is a very coherent fibrillar tissue like tendon tissue. It is not dependent upon any traumatic influence, but is probably due to some bacterial product absorbed from the vaginal canal and circulating in the blood. It is a derangement which may appear at any time during the reproductive life of the woman after the age of twenty-one. It must not be confounded with puckerings of the vaginal roof dependeat upon old adhesive peritonitis.

Sclerosis of the Ovarian Vessels.—Decio (Folia gyn.) says that in infants the structure of the ovarian vessels is always normal, while in adults and old women there are present extensive alterations of the vessels, which may be divided into three types. In the first type, found in the vessels of medium caliber in the hilum, there are degeneration and disappearance of the muscular tunic, for which is substituted hyaline connective tissue. This is the common process of arteriosclerosis and involves only the intima. This alteration begins at about the thirtieth year and increases with years. There is also found in the vessels of the cortex, involving the internal coat, a process characterized by destruction of the muscular coat, hyaline degeneration, and deposit of an elastic substance, derived from normal elastic tissue, called by Unna collastina. The second sort of change is parallel to the normal involution of the corpus luteum, not dependent on pathological conditions, and probably due to the same cause as such involution. A third type is a true sclerosis of the vessels and is not characterized by hyperplasia, but by degeneration solely. The author exemined the ovaries of twenty individuals varying from fifteen to fifty-five years of age.

Tuberculin (Rosenbach) in Surgical Tuberculosis.—Rosenbach (The London Medical Lancet). A study of the biochemical reciprocal effects of bacteria and plants led the author to submit a culture of tubercle bacilli to the action of a trichophytonmyces. From this resulted the preparation of a new tuberculin, in which the poisonous constituents are destroyed and the immunizing constituents preserved. This tuberculin is used in two ways: by subcutaneous injection for the treatment of inaccessible local tuberculosis and by direct injection into the diseased foci—e.g., joints, tendon sheaths, lupus, &c. In both cases it produces inflammatory exudation with accumulations of leucocytes, absorption of tuberculous tissue, and thus a pronounced curative process. The soft parts become very red, are hot to the touch, hard, painful, and there is extensive swelling. Any hollow spaces existing—e.g., joints—are extensively filled with fluid. At the same time general symptoms are observed, such as indisposition and increase of temperature. All these symptoms disappear at once without doing any harm, and leave behind a striking improvement of the tuberculous affection. Where the tissue has not yet suffered any vital damage from tuberculosis—that is, where there is no ulceration, granulation, caseation, etc.,—it is often possible that a few injections completely cure joints and tendon sheaths, etc., in particular where tuberculous infection is recent. On the other hand, parts where ulceration, granulation, caseation, and necrosis are already present become inflamed, so that suppuration accompanied by indisposition and fever ensue, and closed parts —e.g., joints—open and discharge this pus. Even then, if the treatment is continued, a cure with contraction is possible by the gradual expulsion of substances which are not capable of absorption, but, as a rule, the cure must be completed by operation, scraping, thermo-cauterization, removal of affected bones, articular resection, etc. Even in lupus it is necessary, after the affection has been diminished and softened by the injections, to remove the affected parts by operation. The author describes his results in 47 cases, including several varieties of surgical tuberculosis and lupus.

Venesection and Saline Infusion in Pruritus and Other Toxicodermias.—Simon (Deutsch. med. Wochenschr.) says that venesection has long been used in dermatology, but the combination of venesection with the intravenous infusion of physiological salt solution is a comparatively new mode of treatment for this class of cases. The procedure is simple. By means of venepuncture, 100-200 c.cm. of blood are withdrawn, and through the same canula 300-700 c.cm. of 0.9 per cent. sodium chloride solution are allowed to flow into the vein. If necessary, the procedure may be repeated from three to six times or oftener at intervals of five or six days. Simon has obtained the most strikingly favorable results in the various kinds of pruritus, often in cases that had obstinately resisted all other treatment. A striking case was that of a young man who, since early childhood, had suffered from a severe pruritus universalis. Of late, the itching had been so constant and violent as to make him an invalid. Nearly all conceivable therapeutic measures had been used without avail. After the first infusion, he was able to sleep all night, the first time in months. Two more infusions produced an apparent cure, so that he was able to return to work. Similar, if less spectacular, results were obtained in all cases of pruritus. The method was also satisfactory in urticaria, in chronic eczema, and in one case of furunculosis. In psoriasis the results were negative.

The rationale of the treatment is probably somewhat as follows: During the saline infusion, there is a considerable flow of fluid from the blood-vessels into the tissues; soon, however, this fluid again leaves the tissues, re-enters the blood-vessels and, with the production of a marked diuresis, leaves the system through the kidneys. There is thus produced a true tissue lavage which serves to explain the therapeutic effect produced. The latter is not directly dependent upon the amount of blood withdrawn or that of saline solution introduced.

Vomiting of Pregnancy.

Full observance of the hygiene of pregnancy is enjoined by the author in these cases. He recommends that the patient be given early in the morning a draught composed of magnesium carbonate, 2 drams; magnesium sulphate, 1 ounce; mint water (1:40), 1 ounce; water. enough to make 8 ounces; a wineglassful to be taken early in the morning. Cascara sagrada is often prescribed, but must be considered only as a regulator of bowel action, not as a purgative. Laxatives should be given daily or every other day as required, and cascara given daily in small doses for about two or three weeks, after which no further medication of this kind will be required.

The diet should be free of rich or highly seasoned dishes. The evening meal should be light, and is usually best composed of some farinaceous article, such as thin porridge, gruel, or arrow root. In patients obtaining no relief from sickness until the entire stomach contents have been evacuated, and when morning sicknuss is obstinate, it is well to encourage evacuation by the sipping of warm water. Absolute recumbency is necessary in severe cases. Koumiss is of value as a food, and may be utilized when nothing else is retained. Champagne half an hour before a meal is also beneficial.

In the matter of drugs, one finds it necessary to run the gamut of effervescing mixtures, salicin in emulsion form, phenyl salicylate, compound tincture of cardamom in dram doses, antipyrin or acetanilide with sodium bromide, or even small enemata of chloral hydrate and potassium bromide. Cerium oxalate and cocaine are oftener useless than not. Laudanum stupes on the epigastrium, the ether spray, blistering of the cervical spine, or ice-bags applied to the same locality generally depend for their success purely on psychical effect. Wine of ipecac in hourly minim doses is unquestionably of use in some patients. The most efficient preparation is found by the author to be validol, whether the vomiting be reflex, neurotic, or toxemic. Menthol, 1 part in 60 of water, with 30 parts of alcohol or brandy, or chloroform (3 to 6 drops on sugar or in water), are sometimes useful, but are less certain in their results.

Rectal feeding has, according to the author, a psychic effect apart from its other influences, and gastric lavage acts somewhat similarly, though the latter undoubtedly is also beneficial because of the coincident hyperchlorhydria or intermittent hypersecretion.

Mental therapeutics, or antihysteroid treatment, is demanded in the purely neurotic type of vomiting. Massage, and possibly some little mystification in the shape of the application of electricity or blisters, etc., will help in the cure.

The toxemic variety of vomiting, when positively diagnosed, calls for the immediate procuring of abortion, a course never to be undertaken except after consultation with a brother practitioner.—Hall, Indian Medical Record.

Fracture of Rib.

Gaulejac reports a case of unusual fracture of a rib, without external violence. A man, aged 45, was suffering from an acute attack of pneumonia of both bases, having been subject for four years to pulmonary emphysema with attacks of asthma at the beginning of winter and in spring. Suitable energetic treatment resulted in improvement lasting for four days but on the evening of the fifth day, the paroxysm of coughing having become more severe, the respiration embarrassed, the thorax dilated to its maximum, with forced inspiration and an apparent impossibility of expiration a crack was heard, followed by acute pain on the left side of the chest. Respiration and coughing began again at the same time and characteristic crepitation was audible with each inspiration and expiration, produced by the friction of the two ends of the sixth rib, fractured a little in front of the line of the left axilla. The symptoms of pulmonary congestion not being aggravated by the fracture a simple support was supplied round the thorax without interruption to the pulmonary treatment. Ten days later the lungs were free, and in a month there was no further sign of the fracture. Such a case is extremely rare, and although it was very painful it does not seem to have had any deleterious influence on the subsequent evolution of the pulmonary congestion, as soon as the fragments were prevented from irritating the pulmonary tissue and the pleura. The mechanism was the great enlargement of the angle of the rib exceeding its limit of sensibility.—British Medical Journal.

Sterilized Milk as a Cause of Infantile Scurvy.—Jordan (Brit. Jour. Child. Dis.) reports a case of infantile scurvy due to sterilized milk. The case was an eleven months old baby presenting a history of having never been well, was wasting and always crying. It partook of but little food and never went but a few hours without vomiting.

On examination there were found to be no abnormal signs in the chest or abdomen, the spleen, however, being just palpable. There were slight signs of rickets. There was a very marked glossitis migrans, and it was while this was being inspected that an assistant catching sight of the lower gum, exclaimed "Why, it has scurvy as well." It was found that the only teeth cut were the lower central incisors, and that the gum was bluish and spongy about the left of these. In the upper jaw no teeth were erupted, but over the position of the central incisors were to be ssen two large, bluish, spongy masses.

Further inquiry elicited that there had been bleeding from the mouth, and that two weeks earlier orbital ecchymosis had been observed.

Hemorrhoids.—Bishop (British Medical Journal) defends strongly the much-criticized Whitehead operation—"the only one which entirely removes the dilated and dilatable structures, thus ensuring future immunity." After considering the anatomical features of hemorrhoids, and deducing therefrom the rationale, in his view, of the Whitehead operation, Bishop emphasizes, first, the importance of thorough preliminary dilatation of the sphincter.

Secondly, as the dilated venous loops cling most closely to the inner lining membrane they are easily cleared away from the loose subcutaneous tissue around the sphincter. All loops which have insinuated themselves between the outer skin and sphincter muscle must be removed, and the entire sphincter should be clearly defined before any attempt at transverse section of the collar so isolated is made.

Thirdly, there must be no attempt to lock up the bowels after these operations. Feces will have to be passed sooner or later. Which is the wisest, to secure the regular passage of small quantities which are soft and easily molded, or to wait until these amounts have accumulated into large, hard, irregularly shaped masses, certain when they once come within the sphincteric grip to be forced through with all the reckless force which one knows will then be exerted? Which is the most likely to tear through the soft uniting line and to leave the raw surface which must cicatrize?

If the sutures are passed through unreliable tissues they are almost certain to tear through and raw patches become exposed, but the true Whitehead operation properly carried out ensures that all round the anus tough submucosa will be united to skin, opposing an impervious barrier to any infective particles which are likely to come in contact with it. It is not infection, but injury, against which we have to guard in the post-operative treatment.

It is easy to keep this uniting line clean by warm mildly antiseptic douches after any passage of feces.

The action of the bowels should therefore be ensured from the first by the giving of some mild laxative such as confection of senna, liquorice powder, or a saline.

Of simple hemorrhoids operated upon by Whitehead's method, Bishop had 127 cases —78 males and 49 females. There has been no mortality. With one exception he never saw organic stricture following one of his own cases. The Dr. did note in some seven cases about the third week a thin contraction like a fine thread at the line of union. This is dilatable with great ease if detected at once, and once dilated does not return. It appears to be due to some idiosyncrasy on the part of the individual, since in 120 cases it never occurred. It is a matter of no moment, since it is so easily remedied.

The case in which organic structure did follow was one simply due to faulty technique. The patient was a man with old endocardial mischief; the anesthetist was not very experienced, and during the operation it became evident that he was in difficulty and extremely anxious; the latter part of the work was consequently hurried; the skin and submucosa were not well united; a month later the patient returned with a tight anus; the mucosa had evidently retracted and there was a well-marked ring of scar tissue around the lower end of the anal canal, a very typical example of the so-called "incurable organic stricture." The scar tissue was dissected out, leaving the sphincter and skin intact, after which the mucosa, of which there is always plenty, was freely loosened, brought down, and firmly fixed by sutures, which, passing through the tough submucosa, held it securely until healing was complete. This time the result was all that could be wished, and no sign of relapse has since been seen; the anus has functionated perfectly. The last operation was eight months since. Since this case he operated upon another, the primary operation having been done by another surgeon, in the same way with the same result.

This, then, is the reply to the "incurable stricture" indictment. It is, of course, possible that, in consequence of some incredibly bad technique, a condition might be produced which might be beyond remedy, but such a result could not fairly be attributed to the Whitehead operation, while in most cases the removal of scar tissue, the free loosening of mucosa, and especially of submucosa, and its careful union with the skin below will ensure success.

Diagnosis of Scarlet Fever.—Cruikshank (The London Practitioner) thinks too little attention is given to the condition of the mouth, nose and throat, in respect to diagnosis. Most text books say there are three varieties: simple, toxic and septic throats.

The characteristic appearance of the throat, whether mild or toxic, is red, shiny, glazed and angry looking, with minute points of infection on the tonsils, uvula and palate.

There may be swollen tonsils, general edema and no exudation. With such a throat and the so-called pulse temperature ratio, we may expect a rash.

In the septic forms an exudation is present and the diagnosis lies between diphtheria and scarlet fever, and the nonscarlatinal tonsilitis.

In the severe septic forms, tonsilar swelling is great, with ulceration, discharge and perhaps otitis media.

In the mild forms of mixed infection we may have simple scarlet fever plus follicular tonsilitis.

With a definite false membrane, an appeal to the bacteriologist is imperative.

The association of diphtheria and scarlet fever causes much trouble. The author regards post scarlatinal diphtheria and diphtherial scarlet fever as preventable while coincident infection may be common.

Apart from membranous and ulcerative throats, other exudative conditions are to be seen, and sometimes the ordinary appearance of follicular tonsilitis.

The transient nature of the rash in scarlet fever should lead to the ability to diagnose a case without seeing the eruption. Bacteriologists may later give us a simple test, but at present we must rely on clinical observation, (a) before the appearance of the rash is likely, (b) while present, (c) and when absent and no longer expected.

The first period is brief, yet the sudden onset should put one on the alert, and the acceleration of the pulse and temperature greatly aids. The strawberry tongue is regarded as a sign of recession, if not convalescence.

The absence of sweating and high temperature may lead us to expect pneumonia, but the pulse-respiration ratio of the latter as compared with the pulse temperature ratio of scarlet fever, enable us to differentiate.

With a child ill less than 24 hours and definite red papules on the face, behind the ears, and appearing on the body, it is probably "German measles."

If there is a rash it is first seen on the second day; one seen for the first time on the third or fourth day of an uncomplicated?—?

The typical rash is punctuate, not papular and brick red in color, the tint varies from pink to a deep scarlet. It is seen first over the clavicles and sternum, then down over the trunk, back and limbs, the legs last, disappearing in the same order, and vanishes at the end of the first week, leaving, if severe, a greenish discoloration. The more severe the case the more intense the rash.

With a rash we have to exclude certain acute specific diseases, drug and enema rashes, septic rashes: influenza, diphtheria and food poisoning. Copaiba poisoning may perfectly mimic fever, but does not accelerate the pulse above 100. Belladonna is distinguished by dilation of the pupils. Enema rashes are urticarial. With serum rashes there is intense irritation.

It is usually wisest to treat doubtful cases as scarlet fever.

Scarlet fever frequently occurs with but three of the four classical symptoms—rash, throat, tongue and pulse—and may be diagnosed with but two.

In the second week, if called to suggest, confirm or discredit a diagnosis of scarlet fever we should take a culture, especially if severe, staining marked, and desquamation present.

The characteristics of scarlet fever desquamation are: First. Fine powdering on the cheeks, first week. Second. Delicate scaling over the clavicles. Third. Pin holes or worm holes. Fourth. Large scales leaving red tender skin. Scaling is in full swing in the second week with face and neck clear.

The Present Position of Spinal Analgesia.—McCardie, in the Birmingham Medical Review, of Birmingham, England, says that from an extensive review of all the literature available on the subject he concludes that spinal analgesia is retrogressing in favor, and is generally only used where there are marked contraindications to inhalation anesthesia, and local anesthesia is not possible. The exceptions are surgeons who have had a special experience of the method in a large number of cases of the same kind. In Germany the method is being abandoned by 50 per cent. of the surgeons who have used it.

The proportion of deaths, as one would expect from the conditions, is greater than in inhalation anesthesia.

The immediate dangers are at least as great. The after-effects not uncommonly are most severe, affect the nervous system, and on the average at least are as frequent as those following inhalation anesthesia. Many of them are most persistent and disastrous, though the author asserts that the English results are much better in this respect than the foreign.

In spinal analgesia the chief after-effects are headache, backache, and raised temperature. In inhalation anesthesia, vomiting,

The percentage of failures in the former is very high. An excessive dose, whether absolute or relative, as in the case of idiosyncrasy, is more immediately and hopelessly fatal than is one after ether or chloroform, because it cannot be antagonized by mechanical and eliminative means.

The diffusion of liquid in the spinal canal is very different from the diffusion of vapor in the lungs.

In the treatment of emergencies from spinal analgesia one does wrong whether one sets up or inverts the patient; in the one case he may die of syncope, and in the other of poisoning.

Keen says that the ideal anesthesia will abolish pain by abolishing consciousness, but without danger to life. Spinal analgesia, states Zachrisson in a review of the subject, does not fulfill either of these conditions.

The author places analgesia, as a method of preventing pain, between inhalation and local anesthesia. Generally speaking, he thinks it should only be used in certain selected cases.

Printers' Palsy—Chronic Antimonial Poisoning.—M'Walter (Journ. Roy. Inst. of Pub. Health) from his experience among printers in Dublin, in whem he has seen numerous cases of a form of neuritis somewhat resembling that due to arsenic, brings forward the suggestion, although he does not by any means conclusively prove his case, that many of the disorders which printers suffer from are due to antimony and not to lead. Type metal is an alloy of lead, containing from 25 to 33 per cent. of antimony; it also contains tin, and sometimes coppe.. The diseass as he has seen it is not fatal, but is characterized by languor, intense depression, pallor, tremor like writers' cramp but more painful, and rather more confined to the ulnar side of the hand, pains in the region of the bladder and urethra, temporary impotence, difficulty of breathing without physical signs of lung disease, irritable overaction of the heart, and gastric irritation. These symptoms are not very distinctive, but they are found in men working with type who present few, if any, of the classical signs of plumbism. Occasionally colicky pains are present, but by no means so persistent as in lead poisoning. He has seen no liability to pustular eruptions, such as are seen in antimony smelters, or as used to be seen from the use of tartarated antimony ointment. Eulenburg has stated that exposure to the fumes of oxide of antimony is followed by pain in the pelvic region and by anaphrodisia. Most of the cases get well under such treatment as rest, milk, quinine, and nux vomica, but where actual palsy is present it is not very amenable to treatment.

The poisoning is not seen merely among men who handle type, although it is less common among linotype workers. As the smelting operations are often carried out under the same roof as the type-setting, inhalation is easily possible. It has also been shown that the dust of printing offices may contain as much as 11 per cent. of lead, and if antimony should be present in the same proportion as it is in the type metal it can hardly be without effect on the health. It is possible that arsenic may also be present as an impurity in the metal, and that the absorption of that drug may be responsible for some of the symptoms, but the writer claims, at all events, that some of the disorders which printers suffer from are not simply due to the effects of lead.

Floating of the Lungs in a Non-Decomposed, Still-Born Child.—A case recorded by Millardet (Ann. d'Hyg. pub. et de Med. leg.) although possibly very rare, must make one careful in regarding floating of the lungs as proof of live birth, and even still more careful in estimating the value of Breslau's stomach-bowel test. The history of the case was as follows: A 29-year-old primipara entered the maternity hospital because the waters had escaped some hours previously. After admission she lost a considerable quantity of greenish, foul-smelling fluid. Next day the child's heart sounds ceased, the uterus became tympanitic and went into tetanic contraction, and the mother's temperature rose. The head presented in an occipito-posterior position, but as progress was delayed at the vulva forceps were applied, when it was found that the abdomen of the fœtus was greatly swollen. When this had passed the vulva complete expulsion occurred with a loud detonation, followed by much foul-smelling fluid and gas. At the post-mortem examination 38 hours later, the fœtus, almost a full-time one, was not decomposed, although the skin was slightly macerated (as it was at birth). The lungs looked like those of a child who had never breathed, but on the surface there were some bullæ of gas. They floated when tested along with the heart and thymus. When cut up all the small parts floated, but they sank after very firm pressure and also after 24 hours' soaking in water. The stomach was much distended with gas, and so was the whole of the intestine to a uniform degree. The case could not have been one of intra-uterine respiration, for there was not the necessary manipulative interference to let air in, and the child was dead before the development of the gas inside the uterus from the inflammatory condition. The author's opinion is that this was a case of gas developing from intra-uterine infection after rupture of the membranes, and that the gas, being under considerable pressure, had penetrated to the very alveoli of the lung and along the whole length of the alimentary canal. Had the history of the case not been known one would have been very prone to have regarded the body of the child as that of one which had enjoyed an extra-uterine existence. The important point in differentiation was that the lungs, although capable of floating with the heart and thymus attached, were not fully expanded, that firm pressure could expel the air, and above all, in the writer's opinion, that by keeping the lungs in water for some time the elasticity of the lungs itself expelled the gas, so that the pieces sank—a thing which will never occur with the air introduced by the forcible respiratory efforts of the child —Edinburgh Medical Journal.

Locomotor Ataxia and Radioscopy.—Varet (Le Progres) describes a new clinical sign which can be elicited by means of radioscopy, and which should prove useful in the diagnosis of locomotor ataxia in its early stage. If a normal individnal be instructed to breathe slowly and deeply and the incursions of his diaphragm be watched on the fluorescent screen it will be found that both sides of the diaphragm are raised and depressed synchronously and in perfect rhythm, Moreover, the incursions of the diaphragm are regular, so that the movements of successive inspirations and expirations can be superimposed. In a tabetic patient, however, the diaphragm displays the same incoordination and ataxia as the other skeletal muscles of the body, and, according to this author, often in a marked degree at an early stage of the disease. The incursions of the diaphragm are irregular in rhythm, the two sides do not move synchronously, and the successive movements are unequal both in point of duration and amplitude. There is, in fact, the same irregularity and lack of control displayed in the respiratory movements of the diaphragm which characterize the ataxia of the limbs of the tabetic subject. This irregularity in the movements is accompanied by an exaggerated depression of the dome of the muscle owing to a loss of muscular tone. The author, therefore, gives four characteristics to the tabetic diaphragm as revealed by radioscopy—arrhythmia, asynergia, incoordination, and hypotonia. The Dr. points out further that radioscopic examination of patients may not infrequently reveal an early stage of ataxia previously unsuspected. The introduction of the patient into the darkened room may disclose the lack of muscular control when deprived of the visual sense which has not been before in evidence unless Romberg's sign has been specially sought for.

Acidosis.—Mellanby, in The London Medical Lancet, describes a case of cyclic vomiting which he investigated very fully from the chemical side. The Dr. discovered that a condition of acidosis was present, but that this was not the cause of the vomiting. In concluding his paper he discusses the question of acidosis more fully. The author says that ever since Stadelmann, Naunyn, and Magnus Levy insisted upon their importance in diabetic coma, the medical mind has assigned to the presence of B-oxybutyric acid and the acetone bodies in the organism an importance which is nothing short of ludicrous. No matter what the symptoms are, if acetone is found in the urine, it appears customary to describe the case as one of acid intoxication. It seems necessary to mention that even in diabetic coma it is by no means a fully settled question whether the symptoms are directly due to the acid bodies. The comparative failure of the alkali treatment; the vagarious way in which some diabetic patient excretes large quantities of B oxybutric acid for years without symptoms; the absence of any change in the alkalinity of the blood plasma in such patients, whereas in artificial acidosis in animals produced by the ingestion of acids there is a slight, but definite decrease in alkalinity, but occurrence of dyspnœic coma in uræmia, and other non-diabetic cases. These points and several others can be urged against the theory of direct relation between the acids found in diabetes and coma. Besides, the other condition accompanying acidosis—absence of, or inability to use, carbohydrate in the liver—does not appear to have been sufficiently considered as a possible factor in the onset of diabetic coma. Undoubtedly one of the most important functions of the liver is to neutralize poisonous substances which may be either absorbed from the intestine or be found in the metabolic changes of the body. The excretion of toxic substances, such as camphor, calomel, phenol and skatol, a compound of glycuronic acid, makes it evident that this "Entgiftung" property of the liver depends to a large extent on carbohydrates. Other evidence in the same direction was obtained by Hildebrandt, who showed that a lethal dose of thymotin piperidide loses its effect if glucose, cane sugar, maltose, or to a less degree levulose, was given at the same time. May it not well be that in all cases of severe symptoms accompanying acidosis, and even in diabetic coma itself, one of the most important factors is the absence of glycogen in the liver cells, with a corresponding diminution in poison-neutralizing effect, thus allowing the diffusion of intestinal and toxic substances other than acids throughout the organism? Certainly the method of combating acidosis of conditions other than diabetes by large quantities of glucose seems to be more scientific and more likely to lead to beneficial results than the giving of alkalies. By this means one is obviously tackling the condition nearer its source than when simply attempting to neutralize an already fully neutralized series of acids which are probably of no more importance than some of the other known clinical abnormalities, such as the presence of creatin, which accompany this condition. For even if the casual connection between acidosis and diabetic coma was accepted, there can be but little doubt that the acidosis as such, accompanying fever, gastroenteritis, delayed chloroform poisoning, and cyclic vomiting, and many other conditions is, however, of symptomatic significance. In other words, the term acid intoxication, in the new sense of the word, applied to these conditions is a misnomer. The quantities of B-oxybutric acid and other acetone bodies excreted in these conditions are small, i.e., 10 to 15 grams at the most, compared with the quantities excreted in diabetes, e.g., one of Magnus Levy's cases excreted 160 grams per diem, and it is difficult to see how they could possibly produce symptoms.

Atelelosis.—Gifford (British Journal of Children's Diseases) says that infantilism may be acquired or essential. The former results from an intoxication with the poisons of enteric, rheumatic or other fever, or is brought about by defective action of the pancreas or the thyroid gland. This form is not extreme in degree and presents no characteristic disposition of the physiognomy or of bodily proportions, is never transmitted and is seldom associated with sterility. Essential infantilism may set in at any stage of progressive development, and generally speaking its characters are those peculiar to the time of life at which it begins. Hence it is most easily to be recognized when it starts in babyhood or early childhood. The comparatively large head, long body, short limbs and undeveloped facial characters, together with the good, though perhaps childish, intelligence sharply define ateleiosis from all other disorders. It never leads to arrest of development, but to a serious retardation of growth, as in one case where the increase in length and in weight which ought to have been accomplished in five years was spread over a term of 35 years. There is a sexual and an asexual form of the complaint. Generally puberty is delayed for several years, but occasionally the organs of sex remain infantile throughout life. In the latter event the infantilism is of extreme degree, and save for the slow increase in weight and size the infantile appearance remains throughout life. In the cases of sexual ateleiosis the appearance alters with increasing years, and in the end all that is left of the original infantilism may be conspicuous shortness of the body, a large head, and other childish proportions of the body and limbs. Senilism, like infantilism, is of two kinds—symptomatic and essential. Essential senilism is very rare, only three cases being on record. Though some cases show a mixture of infantilism and senilism it is most probable that the latter is consecutive to the former. The subject of senilism is a remarkable and pitiful object. He is conspicuously dwarfed, very thin, with weak, small muscles, the skin and its appendages are withered, and the growth of hair on the scalp and pubes is scanty and grey, the vivacity of childhood is absent, the nose and jaw are well developed, and the sexual functions present.

The Treatment ol Floating Kidney.—Furbringer (Deut. med. Wochensch.) points out that a fully developed movable kidney that does not give rise to symptoms will not require treatment, and such patients should be assured of the harmlessness of their condition. If the abdominal walls are flaccid some means of support, as bandages or a corset, should be employed and will be found sufficient in the majority of uncomplicated casrs. They must, however, exert pressure upon the entire abdomen from below forward and from above backward, and lift up the kidney indirectly, that is, through the subjacent abdominal contents. Rest on the back relieves the frequently recurrent pains, but he has never seen any permanent restoration of the kidney to its normal condition through prolonged use of this method. Massage, if employed at all, should be very gentle. Operative fixation of the kidney in cases where this condition causes marked disturbance and interference with work gives excellent temporary results in a larger number of instances, although the end results are less promising and the procedure is not free from risk to life.

Vasoneurotic Symptom-Complex in Children.—Hamberger (Munch. med. Woch.) says that there is a type of child which from a congenital condition of vasomotor instability has various heart and vascular symptoms, which, although entirely functional, cause much anxiety both to parents and physicians, and seem to indicate organic heart disease. These are the so-called nervous children and are often the offspring of nervous parents. The symptoms indicate a feeble, unstable innervation of the vascular apparatus, and of the central nervous ganglia of the heart as well. The heart symptoms are palpitation, uncomfortable feelings over the cardiac region such as feeling of pressure, sticking pains, etc. These occur generally after exertion or mental disturbances. There may be a feeling of shortness of breath and a sort of modified angina pectoris may occur. There are slight epigastric pulsations and diffuse apex beat, without dilatation of the heart;

the heart sounds are normal, the cardiac rhythm is regular. All these symptoms are well-known in the adult, but have been little observed among children. The epigastric pulsation is caused not by the ventricle, but by the descending aorta. In these cases the pulse frequency increases with respiration and decreases with expiration. One of the vascular symptoms is headache after mental disturbance or work. This headache is bilateral, either frontal or occipital. It is dependent on changes in the circulation of the brain. Suddenly occurring congestion of these vessels causes dizziness and faintness. These symptoms simulate anemia, while there is no abnormal condition of the blood, but one of the vasomotor system. There is a tendency to cold and clammy feet and hands, and easy frosting of these members. The hands look blue or red and the parents say "this child is always cold." Pain in the heart may be due to hyperemia of the heart muscle. There are many objective signs: blushing, dermographia, beating of the carotids, increased arterial tonus at the radial and temporal arteries, lordotic albuminuria, and bronchial asthma. There is nervous instability of the entire circulatory apparatus. The contraction of the arterial walls may be such as to simulate arteriosclerosis. Normally in children under six years of age the arteries are rarely palpable, only a movement of the pulse being felt, and not the wall of the artery itself, while in these children at the time of contraction the arterial walls are palpable. There is great variability in the arterial tension. All children with rigid arteries are found to be nervous. Cold feelings all over the body with shivering simulate chills, with a hot period following. These disturbances are purely vasomotor. Such children are often so pale and have such blue rings under the eyes that they are given iron under the belief that they are anemic. These nervous symptoms are found in boys as well as in girls. The causation seems to be a congenital weakness of the vasomotor control of the vessels. Alcohol, tobacco, and bacterial toxines produce similar symptoms, especially when occurring in such persons. Pallor in fear, and redness in anger with heart-beating are common. These children are very unstable in their dispositions and easily disturbed; psychical traumata affect the vessels and the heart as well. Children with good dispositions are over-sympathetic. The diagnosis of this condition is not difficult; the sudden headaches must be differentiated from headaches produced by refraction errors, catarrh from adenoids, ear diseases, and migraine; the dizziness from anemia and epilepsy. The prognosis is good if the cause of the disturbances is recognized and measures are taken to regulate the vascular apparatus. Hygienic measures—baths, fresh air, good feeding, and mental control—are the measures to be adopted in strengthening and regulating the vasomotor system. Such children should not be too much humored, and should be taught not to yield to their disagreeable feelings.

Acts of Volition After Severe Injury.—Lochte (Wien. med. Wochenschr.) from consideration of a case where a man who was stabbed in the abdomen and who died ten hours later from loss of blood was alleged to have defended himself forcibly, wounding his assailant with a stone, and afterwards to have walked 1 or 2 kilometers—has been led to make a general investigation of the capability of a severely injured person of carrying out various actions after the injury, and has brought together a number of interesting cases dealing with acts performed after incised and stab wounds, after gunshot injuries, and after injuries from gross violence, such as crushes or falls.

Extensive stab wounds of the heart and of neighboring organs, from the observations adduced, need not at once suspend the power of action; even after complete severance of the large arteries in the neck quite complicated actions have been known to be carried out. Severe injuries to the bones of the lower extremities, as is well known, do not always render a person incapable of walking, even for a considerable distance. Gunshot wounds through the heart, lungs, or abdomen, as examples show, by no means suspend the power of voluntary action, and even when there has been considerable injury to the brain from bullet wounds of the skull, the injured person, as was seen over and over again in the South African War, may still be capable of considerable power of action. A similar thing is seen after fracture of the skull so long as consciousness remains present. Other examples quoted are movements or actions carried out after such injuries as rupture of the right auricle from a kick by a horse, rupture of the liver by being run over, rupture of the bladder, and rupture of the pregnant uterus and avulsion of the small intestine from attempt to procure abortion. His final conclusion, stated emphatically, is that, in cases of this nature one cannot, from a medico-legal standpoint, consider any movement or action impossible unless there is very clear evidence to the contrary.—Edinburgh Medical Journal.

Injection Methods for Preparations of Mercury and Arsenic.—Ullman (Wien. Med. Woch.) finds that the danger of injections of insoluble salts of mercury has been over-rated, partly as a result of the fact that too large a dose has often been given. Accidents may certainly occur as a result of idiosyncrasies, but this is true of any powerful procedure. Persons with a so-called idiosyncrasy usually prove either to be suffering from renal disease or to be still under the influence of mercury previously administered. Regular examination of the urine carried out at least once a week would reduce the fatal cases of idiosyncrasy almost to nil. He and Lang have examined the notes of sixty-nine cases occurring between 1889-1908 in which death resulted from injections of mercury; one-third only being injections of insoluble salts and a part only of these to injections of grey oil. The doses given had been often three, four or even ten times the customary dose, while other defects in technique were those of absence of thorough examination of the patient and of the urine, and injection at unsuitable sites. Lassene has collected from the literature thirty-one cases in twenty-five years, in which injections of grey oil seem to have been, in part or wholly, the cause of death, even without over-dosage or other recognizable defect in technique. A large number of cases is reported of severe illness ending in recovery both after intramuscular injections of grey oil and also of the soluble salts of mercury. Embolism is the most frequent condition, and the author considers it to be the one accident whose occurrence cannot be prevented with absolute certainty, though the condition is not dangerous if the injection has been aseptic and not more than half a cubic centimeter has been injected. One fatal case of late embolism, after five injections of grey oil in all had been made, is reported in twenty-five years. The author himself always makes use of the intramuscular method, and his experience now extends over many thousand cases. The only unpleasant by-effects have been symptoms of local irritation and slight toxic general symptoms, the latter almost always after calomel or after hydrarg. oxyd. flavum, occasionally after Hg. salicyl., never after grey oil. Fifteen fatal injection cases have been collected by Lassene from the literature of thirty years. In some of these it is not improbable that the injections or a large part of it was made into the fat and not into the muscle; that on this account it remained to a great extent inactive and led to the injection of more mercury, while at the same time loss of fat on the part of the patient might lead to absorption of the mercury previously injected, and so to severe and fatal intoxication. The Dr. has repeatedly seen cases of this description although they have not ended fatally; in the course of a year he has operated upon two such cases and removed the accumulation. In future, .therefore, attention should be directed to ensuring that a mercury or arsenical is made into the muscles themselves and not into surrounding tissues. Undoubtedly also in the case of women very fat but poor in muscle, in people with high grades anemia or cachexia, and in children under twelve years of age, the subcutaneous method should be substituted for the intramuscular. A further necessary condition for intramuscular treatment is that the patient should be organically sound. Until more effective principles for the destruction of spirochætes as for instance in certain cases the intravenous injections of salvarsan are developed, the method of treatment preferred by the author is the intramuscular application of the less soluble preparations of mercury.

Symptomatology and Treatment of Retroflexion of Pregnant Uterus.—Graefe (Monatschrift fur Geburtschulfe und Gynakologie) has investigated conditions in regard to the disturbances from this cause in 200 women and found that 61 had experienced no local discomfort from this displacement of the uterus. The pregnancy was in the second or fourth month and in two of these patients the uterus was very large, owing to the additional presence of a myoma. These 61 cases show that retroflexion does not necessarily cause pain or discomfort even when the uterus is unusually large. One patient in this group had had severe sacral pains, but after cure of a coincident suppurative catarrh of the cervix and large erosion the pains vanished permanently. Although the retroflexion persisted uncorrected, only 17 of these 200 complained of a sensation of downward pressure, and only seven of pressure on the rectum. In six of these seven this sensation persisted after the uterus had been restored to place, suggesting that it was purely a nervous phenomenon. Only 25 of the total 200 complained of traction on the bladder and tenesmus and there were eight women in the second month, twelve in the third, four in the fourth and one in the fifth month of pregnancy, while 38 other women from two to six months pregnant had no bladder disturbances, not even the two with incarcerated retroflexion. One patient complained of pain radiating to the leg, but it persisted unmodified after the uterus had been restored to place. As a rule, disturbances were noted only in women inclined to nervousness or hysteria. Abortion occurred in only 31 of the 200 cases, the interval after correction ranging from the first days to four months, and in two of these cases the abortion was criminally induced while the other women had severe venereal disease. Graefe thinks that the retroflexion alone does not induce abortion but that it has a favoring influence when the uterus is already pathologic. Severe pain and hemorrhage indicate, at once, correction of the retroflexion. A point of great importance in the correction is to keep the bladder empty. Correction succeeds sometimes only with patient in the knee elbow position. In some cases the uterus rights itself in a day if the patient lies on her side. or, better yet, in the ventral decubitus in bed. If the adhesions are tough and the patient suffering and all other means fail, a laparotomy becomes necessary, although Graefe had to resort to it in only one case.

Chemotherapy of the Experimental Tumors of Mice.—Wasserman (Deutsch. Med. Wochen.) says that Gosio suggested that sodium tellurate and sodium selenate could be used to determine the vitality of human cells. In the presence of living cells these salts are reduced to a metallic form and are precipitated as a black or red sediment. The Dr. applied this observation to determine the vitality of carcinoma cells in blood serum of healthy persons and in the blood serum of cancer patients. The writer was unable to observe any difference but made the startling discovery that the reduced selenium and tellurium were thrown down on the carcinoma cells. In other words, there existed a special selective affinity between the reduced salts of selenium and tellurium and cancer cells. A further observation demonstrated that solutions of these salts were capable of destroying carcinomatous tissue. In order to obtain this effect upon actual tumors, he combined selenium with eosin and introduced this solution into the caudal vein of mice affected with carcinoma. After seven to ten injections, a number of mice were cured so far as local examination could determine and at necropsy no trace of carcinoma could be determined. He concludes that it is possible by means of suitable eosin-selenium preparations, administered by way of the blood stream, to cause tumors, actively growing in mice, to become softened through disintegration of their cells, to be absorbed and, when the tumor is not too large in proportion to the body-weight of the animal, to cause it to heal without recurrence. These experiments merely establish an essential scientific fact, namely,that the existing view that it is not possible to have chemical substances pass out of the vessels into a tumor and destroy it, is untenable. At the present time there is no evidence that this substance will act in the same way with human cancers. This question has not yet been investigated. However, an essential beginning has been made and a solid foundation established, extension of which along these lines may yield progress in human therapy.

On Cases of Night Blindness with Peculiar Conjunctival Changes in Children.—Stephenson (British Journal of Children's Diseases) believes that this condition is not very uncommon in the lower strata of society, especially in orphanages. It prevails in the summer and autumn, and is seldom seen during the winter months. The symptom complex, in its fully developed form, includes (1) changes in the ocular conjunctiva and (2) night blindness.

The conjunctival changes are as a rule limited to the interpalpebral zone, and usually affects both eyes. More or less triangular areas listening dry-looking plaques are seen on the conjunctiva. This foamlike material can be easily wiped away and will then return in from 24 to 36 hours. The condition is commonly named "epithelial xerosis" and is caused by the xerosis bacilius.

Tuberculosis Pyosalpinx.—Barbour and Watson (Jour. Obst. and Gyn. British Empire) from their study of three cases consider the infection as traveling through the mucous surfaces. In none of the cases were there evidence of abdominal tuberculosis, but it is conceivable that the organisms were there in small numbers, and that the paritoneum was able to protect itself, while some were drawn into the tubes. After the primary infeciion of the mucosa of the outer part of the tube there is evidently a lymphatic spread inwards towards the uterus. The epithelium is first stimulated to overgrowth with deep extension into the tissues, giving an appearance very like carcinoma, and it is conceivable that an arrest of the tubercular process before destruction of tissue occurred might leave the epithelium in such a state of activitg as to take on a cancerous character.

Effect of Atropine on the Pulse During the Administration of Digitalis.—Selberberg (Proc. Roy. Soc. Med., London) discusses the effect of atropine upon pulse rate in cases under treatment by digitalis. It is not yet definitely known how digitalis slows the heart, but it acts best on mitral cases of rheumatic origin that have developed auricular fibrillation and arrhythmia, while the senile type of cardiac degeneration, those with regular rhythm and the tachycardia of fever do not respond so well. Lewis considers it due to a partial block, and that cases with a prolonged A-C interval,that is, with a delay in conductivity, will become slower on digitalis. But clinically, the cases with rapid irregular action, that is, with a short conduction time, become slower. Cushing thinks that digitalis increases inhibitory action of the vagus and prevents many impulses reaching the ventricle. Is the action mainly vagal, or are the conducting fibres of the auriculo—ventricular bundle themselves, or is the heart muscle lowered in irritability due to improved nutrition? In the senile type there is loss of inhibitory power of the vagus and so atropine has little effect; also the cardiac musculature is so degenerated that nutrition cannot improve it much. By action of atropine the effects of vagus inhibition could be removed and so one of the possible factors would be cut out. The patient's pulse was studied at rest, under atropine alone, under digitalis and under the drugs combined. It was found in the rheumatic cases with rapid heart that the rate was slowed by digitalis and on administration of atropine, while the rate was increased, it in no case reached the original rate before drugs; if the effect had been due solely to vagal inhibition, it is fair to suppose that following atropine the old rate would have been reached. There are thus two component actions of digitalis, one vagal and the other one cardiac tissue, and they vary in different conditions, in the cases of auricular fibrillation that give high increases of pulse-rate on the administration of atropine, digitalis works its least, for following digitalis atropine has almost no effect in raising the rate; that is, most of the effects of the digitalis are on the cardiac musculature these cases, as a rate, do well and may even resume work again. By the study of pulse-rates following atropine with and without digitalis, it is possible to find out whether digitalis is acting on vagus or cardiac tissue.

Miscellaneous.

Radiotherapy and Glandular Atrophy in the Treatment of Fibromata.

F. de Courmelles believes that the penetrating effect of the x-rays is shown by the atrophy which they cause in the ovaries, mammary glands, and lymphatic glands. He finds the x-rays of the greatest value in the treatment of fibroids. They relieve the hemorrhages, make the intervals between the menstrual periods longer, lessen the pain and pressure symptoms, and reduce the size of the tumors, in some cases causing them to disappear entirely. X-rays should not be used in the treatment of vaginal fibroids, of those undergoing malignant degeneration, and of cases in which the symptoms are rapidly culminating, and must be treated more rapidly than can be done by means of the rays. With proper technique, the employment of penetrating rays, the use of a proper filter, and the separation of the treatments by proper intervals there will be no bad symptoms, such as burns, and only a tanning or a slight erythema of the skin over the abdomen, and epilation of the hairs. In disorders of menstruation with hemorrhage, especially at the menopause; this treatment is valuable. In cases in which sterilization is necessary the use of the rays will avoid a mutilating operation. In cases of ovarian pain not due to tumors the pain may be relieved by this method of treatment.—Gazette de Gynecologie.

Examination of Butter in Human Milk by Centrifugation.

Pleuchu and Rendu believe that centrifugation is the best method of estimating the amount of fat to be found in human milk, and far more correct than the method of chemical estimation. They base their statement on 3,450 examinations of milk made in forty-six nursing women on 530 consecutive daps. These women were chiefly primiparæ between the ages of twenty and twenty-five years, staying in the Ramond Nursery. Although these are not absolutely correct they are sufficiently so for all practical purposes. The authors found that there are daily variations in the quantity of fat, and this shows how incorrect a single estimation may be. In general there is an average of 34 grams of fat per liter, the specimen being taken at the beginning of each nursing. The influence of multiparity, the age of the nurse, and the duration of lactation are quite variable. The influence of feeding, of galactogogues, and of menstruation are almost nil. There are four factors that do affect the amount of fat; these are the quantity of milk secreted, the larger the amount of milk the smaller the amount of cream; the time of nursing, the morning milker being richer in fat than the evening; the phase of nursing, the first milk drawn being richer than the last; and the symmetry of the breasts, the smaller breast giving the greater amount of cream; milk too rich or too poor in cream may cause diarrhea, especially in the prematurely born. —Lyon Medical.

Ideal Conditions of Serum Manufacture.

If there is one therapeutic agent which, more than another, should be prepared with scrupulous care, that agent is diphtheria antitoxin. Its preparation should never be entrusted to the inexperienced or to those who are hampered by lack of facilities. It should have its origin in the blood of healthy horses—animals whose blood is known to be pure. The welfare of the diphtheritic patient demands a serum from which every element of conjecture is eliminated. In the opinion of many physicians these essentials are best exemplified in the antidiphtheritic serum of Parke, Davis & Co. Certain it is that this antitoxin is manufactured under conditions that are ideal. Miles removed from the smoke and dust of Detroit, hundreds of feet above the river level, the company maintains a large stock farm, equipped with model stables and supervised by expert veterinarians. Here, in the best possible condition, are kept the horses employed in serum production. The laboratories in which the antitoxin is prepared, tested and made ready for the market are the admiration of scientific men who visit them.

The Surgical Treatment of Intra Cranial Growths Considered with Reference to the Expectant Therapy.

Horsley (Neurologisches Centralblatt) says that if one considers the experience of the last 20 years gained in the practical treatment of brain tumors, one sees plainly that a reconsideration of the entire subject must be undertaking. The difficulties of diagnosis and localization of the lession have placed this subject at the presents time in the false position which appendicitis occupied 15 years ago. Up to within a few years ago the mojority of cases of brain tumor died without, in reality. receiving any treatment, There is no medicine known which has the slightest influence upon neoplastic tissue. Since only death is to be expected, without actual surgical treatment, the expression "expectant" therapy according to the author's opinion; bears the stamp of cruelty. As the first step in the direction of reform one must acknowledge that the so called "expectant" treatment in brain tumor cases is false, because it is absolutely useless. In recent times it has been customary, even though the existence of a growth is presumed, to wait until the last stage of the disease appears aud the symptoms of the brain pressure, choked disk, headache. and vomiting occurs. He holds this procedure to be as unjustifiable as if one in a case of carcinoma would always wait until the symptoms of glandular infection appeared. It is necessary that neurologists should have a clear understanding as to the pathological conditions which ought to be regarded as grounds for surgical treatment. The signal conditions can be best discussed in the consideration of what Hughlings Jackson termed the two-fold division of neurological phenomena, namely, excessive activity and retarded activity of the central nervous system. Excessive activity concerns the irritative effect of the lesion. With reference to the latter, every case of localized epilepsy, which is not clearly of idiopathic origin, must be treated by operation; a simple exploratory operation can be undertaken without dauger to the patient and since the successful treatment of a malignant tumor depends entirely upon its early removal, there can be no intelligent opposition raised against this proposition. The retarded activity of the central nervous system has to deal with the destructive effect of the lesion. The second proposition is, therefore, that every case of progressive motor or sensory paralysis of intra-cranial origin should be treated by exploratory operation. Also every case of a definitely recognized brain tumor must be treated according to its localization, either by the removal of the growth or through the reduction of the intra-cranial pressure. The logical conclusion should be the following, except where with the extirpation of the tumor an important function, such as speech, is destroyed; total extirpation of the neoplastic tissue the rule and simple decompression the exception. This point must be emphasized. Since because of the ease with which blindness and other pressure symptoms may be relieved by a simple decompression operation, the danger is present that the palliative operation will be utilized instead of the curative total extirpation. There are only two conditions where a palliative operation is justifiable. These are cases where one knows that the growth lies in a spot which is inaccessible or where no localization is possible. In both cases the performance of subtemporal decompression is the best procedure. In most all cases of brain tumor the question arises whether anti-syphilitic treatment should be administered in the beginning and if administered, how long ought it to be continued. The author's opinion on this point is that where an anti-syphilitic treatment has been given for six weeks and a marked improvement has not occurred, then the case should be surgically treated. Another important point to be considered is whether our present manner of treating intra-cranial syphilitic disease is sufficient. This question was originally propounded by Sir William Gowers. He called attention to the fact that a syphilitic lesion of the encephalon was not fully healed, although marked improvement took place after the administration of anti-syphilitic treatment and that after a period of cessation the symptoms again appear. The relative incurability of cerebral lues indicates that the time has come to introduce energetic measures, and particularly so since Ehrlich has demonstrated that the severe symptoms of the first infection can be quickly relieved through an arsenic injection, but that the good effect of the injection fails when the disease has attacked the brain. The writer proposes in syphilitic pachymeningitis, both acute and chronic, and the so-called syphilitic neuritic optica a new method of treatment. The author calls attention to the similarity between the subdural spaces and the peritoneal cavity. Also the necessity for bringing as large doses of mercury as possible quickly in contact with the syphilitic virus. The Dr. has treated cerebrospinal lues where the customary treatment had failed with the best results by opening the subdural space and irrigating it with a corrosive sublimate solution of 1 to 1000. Since a gumma is composed entirely of a necrotic infected mass Horsley considers it as important to be curetted thoroughly as in a similar tubercular lesion. He has practiced these procedures in all conditions of syphilitic disease of the brain with excellent results, except in two cases, both hemorrhagic in character. The first one had a great hole in the dura filled with a blood clot, and the pressure from this clot had existed too long for the brain tissue to recover itself. In the second case the hemorrhage had already penetrated the ventricie. He concludes by emphasizing the great benefits to be derived in all syphilitic diseases of the central nervous system by the opening of the sub-dural space and its thorough irrigation with a 1 to 1000 sublimate solution.

Treatment of Pernicious Malaria.

W. W. James, of the Ancon Hospital, Ancon, Panama, has made an interesting report on the treatment of pernicious malaria. Referring especially to æstivo autumnal malaria, he brings out many points of interest. James writes that it is impossible to lay down any hard-and-fast rule as to the number of parasites required to constitute a dangerous case of malaria. He does, however, regard an infection of 200,000 parasites per c.mm. as being suspiciously indicative of a bad case. This means that there is one parasite to every twenty or twenty-five erythrocytes. With infections heavier than these vigorous action is taken. Reminding his readers that malaria brings about death in four different ways, he discusses the means of preventing death in the first three cases. In the first case, the capillaries of some vital organ become blocked by erythrocytes, which are so damaged by parasites as to clog up the organ. This is frequently the case with the brain. Second, the organism is often overwhelmed by the sporulation, simultaneously or continuously, of parasites in such numbers that the amount of toxin liberated from them causes dissolution. Third, by a combination of these two, the capillaries of some important organ being so clogged with erythrocytes as in the first case, that they are unable to cope with the toxins. In the case of death by the influx of numerous parasites, James writes that, whereas the parasites are of varying resistance in different infections, it is his opinion that if enough quinine can be thrown into the circulation at the beginning of the cycle, the younger parasites can be so affected as to cause the abortion of the subsequent paroxysm.

Experiments to ascertain the compatibility of quinine salts with blood sera resulted in the following deductions: Those salts of quinine which are most soluble in water are not miscible with blood serum. The three salts commonly used for subcutaneous injections, when prepared in the strength most frequently used in hypodermic administrations and mixed with equal volumes of ox serum, produced a solid gelatinous mass. Quinine salts, then, in the dilutions usually employed are unsuitable for hypodermic use. Solutions of quinine salts in concentration employed for hypodermic injection, when mixed with blood sera, produce quinine in an altered form. In intravenous administration, it is necessary, in order to avoid the dangers special to quinine, to dilute considerably. This method of application is called for in cases of emergency, as in pernicious malaria, with coma or other cerebral symptoms. The author is convinced that the failure of quinine in large doses, administered early in the cycle as in several cases observed, was due to improper administration. It is reasonable to suppose that more quinine, when administered hypodermically, is assimilated by the system from small doses than from large ones. The author submits charts to show the progress of several cases under his care.

In summary, the author maintains that two conditions must be inhibited: (a) "The blocking of the capillaries by the parasite-infected erythrocytes, and (b) the simultaneous sporulation of a great number of parasites."

"The logical and practical treatment is to give quinine early in severe infections, subcutaneously in large doses, or by intravenous injections, in dilutions of 1 to 150, or greater. In algid cases, quinine is best given intravenously."—Jour. Tropical Med. and Hygiene.

The Resorption of Inflammatory Exudates.

The resorption of inflammatory exudates, such as those frequently following acute pleuritis, is accelerated by the administration of Idoneen (Curtis). It will be found that Idoneen (Curtis) for this purpose is more effective than the iodide of potassium, for its contained iodine (three per cent.) by reason of the ease with which it dissociates itself, thus permitting the most powerful of iodine effects, exerts an influence far in excess of what would be expected of this percentage. In practice, Idoneen (Curtis) is from fifteen to thirty times more active in iodine properties than other agents containing a similar percentage of the element. Idoneen (Curtis) will be found to influence all inflammatory exudates, aiding markedly in their resorption.

A sample bottle of Idoneen with literature, may be had by addressing The Idoneen Chemical Co., Cleveland, Ohio.

Treatment of Early Syphilis.

According to Geronne and Gutmann, the results of treating syphilis are excellent if the patient receives salvarsan during the primary stage before secondary symptoms of the disease have developed, particularly if the Wassermann test is still negative. Thus, among 20 patients with negative reaction, 17 have remained free from symptoms, while among 17 with positive reaction, only 8 presented no further signs of the disease. In all cases, energetic treatment of the primary sore by means of calomel, mercurial plaster or excision is advisable. Where secondary symptoms appeared, a second or third dose of salvarsan, especially if given intravenously, was usually sufficient to render the reaction negative and to cause rapid fading of the lesions. With so excessively chronic a disease as syphilis, all statements as to a permanent cure must naturally be very guarded and since salvarsan has been in use only a relatively short time, it is impossible as yet to come to any definite conclusions. It can be said, however, that the results of the early use of this drug are much better than those seen after the early use of mercury, even in large doses. It is of the greatest importance to recognize a lesion as specific as early as possible; this is best accomplished by examining every suspicious lesion for spirochetæ before any treatment is attempted. General rules for the management of early cases are as follows: When the position of the chancre permits, it should be excised, otherwise it should be treated with calomel when open, and with mercurial plaster when closed. Where the sero-reaction is still negative, it is probable that salvarsan alone will be sufficient, provided two or three injections are given within two or three weeks by the intravenous route. Where the reaction is already positive, it is best to also order a course of mercury and then to carefully control the patient by means of the sero-reaction, to decide if further treatment is necessary.—Berl. klin. Woch.

Sporotrichosis Septicemia and Anemia with Febrile Course.

Antonio describes a form of disease localized in the bones and skin due to sporotrichosis and simulating syphilis or tuberculosis. The disease is due to the growth of the pathogenic fungus sporotrichum, a saprophyte. It causes skin lesions similar to pityriasis and trichopyton. There are three forms: cutaneo dermic; a form with localized gummata and lymphangitis without ulcerations; and another with lesions that are mucous, muscular, osseous, synovial, etc. Some cases are slow and insidious in their beginning, others rapid and inflammatory. Generally the lesions are indolent, torpid and chronic, accompanied by little pain. In rare cases anemia and cachexia are produced. The prognosis is good except in the mucous or laryngeal forms. The patient seen by the author was a girl who presented a gummatous inflammation affecting bones, muscles, periosteum, articulations, and skin. Treatment with iodides is somewhat unsatisfactory.—Il Policlinico.

Colloidal Nitrogen in the Urine in Cancer.

Mancini, employing Salkowski's method of determining the colloidal nitrogen in the urine, found that when the kidneys are healthy the excretion of colloidal nitrogen is increased by all processes that increase the amount of colloidal nitrogen in the blood and lymph, namely, exudates and transudates, pneumonia, pleurisy, circulatory failure, and inflammatory and suppurative processes. The increase associated with carcinoma is attributed to metabolic changes and to autolysis of the tumor.—Deutsches Archiv fur klinische Medizin.

Chorea and Hereditary Syphilis.

Sarabia described before the Spanish Society of Gynæcology a case of chorea in a child eight years of age which affected the left side of the body and had lasted for four months, resisting all the usual methods of treatment,—bromides, arsenic, etc. Inquiry having elicited the fact that the father had suffered from acquired syphilis an anti-syphilitic plan of treatment was pursued in the case of the chorea. In twenty days the child was cured. The author proceeds to discuss the manifestations of inherited syphilis in infancy and childhood. The syphilitic and parasyphilitic affections of infants, he says, express themselves in the most various ways according to the organ or tissue affected. They may simulate very closely the allied affections of the same organ of a non-syphilitic character and that they are at bottom manifestations of syphilis may only be made plain by the result of treatment. Hydrocephalus, for instance, may sometimes be cured only by anti-syphilitic treatment. This being well known and admitted with regard to organic diseases, may not some functional disorders like epilepsy, hysteria, chorea have a like etiology. The alterations in the nervous centres of children of a sclerotic nature and dependent on a form of arteritis, described in autopsies by P. Marie, have been evidenced chiefly by symptoms of a convulsive or paralytic nature and where these changes do not reach a degree which becomes visible to the eye or the microscope it is possible that they may be at the root of some of the functional disorders of the nervous system of children. Syphilis seems to be the most probable agent in producing these alterations in the nerve centres.—British Medical Journal.

Experiments on the Pharmacological Effects of Salvarsan.

Ferrannini states that we know much about the therapeutic effects of salvarsan but little about its pharmacology. He has therefore instituted a series of experiments to ascertain its effects on the skin, mucous membranes, subcutaneous and submucous tissues, and endothelium of the vessels. His conclusions are that in the solutions generally used therapeutically it has no effect on the skin, mucosa, and endothelium of the vessels. It manifestly irritates the subcutaneous tissues, which explains the inflammatory process which is intense but generally ends in resolution. In subcutaneous injections the substance remains a long time in contact with the subcutaneous tissues, while when rubbed on the skin, instilled into the eye, or injected into a vein it remains for but a short time in contact with the tissues.—La Riforma Medica.

Anesthetics In Labor.

Though labor is a physiological process, it will often be the duty of the physician to diminish pain, even where no operative interference is necessary. The oldest remedies are ether and chloroform and the latter particularly has been popular ever since its introduction. In many cases of parturition, very small amounts of chloroform (10 to 15 drops) poured on a mask will be amply sufficient to deaden the pain as the head passes the perineum. This "chloroforming a la reine," as it is sometimes called, is never dangerous to mother or child and does not in any way interfere with the action of the abdominal muscles. It is, however, less suited during the stage when the cervix is dilating. The results obtained with lumbar anesthesia in obstetrics were really excellent since the whole process of labor was frequently rendered almost painless and the contractions of the uterus and the abdominal muscles were hardly interfered with. Unfortunately, however, the procedure is not always harmless and there is always danger that the injected anesthetic may reach the medulla and there paralyze important centres. More recently the morphine-scopolamine narcosis has become very popular in many quarters. Scopolamine causes a stuporous condition during which pain is felt only very indefinitely. The memory of what has happened is very soon lost, so that these patients frequently do not remember that they have been in labor. The morphine to some extent counteracts the toxic effects of the scopolamine. There are, however, numerous disadvantages. Thus labor may cease altogether, the fetal heart sounds may become indistinct or the child may be born in a condition of aphea. It is obvious that these drugs can be employed in a hospital where there is constant supervision, but that they are hardly safe in the hands of the practicing physician who cannot remain with his patient during the entire period of labor. Morphine alone is not popular, since it only too often will prolong the process of labor, and other drugs are often of still less value. Occasionally the pains may be mitigated for a half hour to one hour by anesthetizing the nasal mucous membrane with 5 drops of a 5 per cent. solution of cocaine, but this should not be repeated too often for fear of intoxication. Sacral anesthesia, according to the method described by Cathelin is often very effective, yet there may be toxic effects. The labor pains are often diminished in intensity and the technique is not simple. Of the more recent drugs to alleviate the sufferings of child-birth is pantopon, a purified extract of opium. In multiparæ, 1 Cc. of a 2 per cent. solution will usually suffice, while in primiparæ a second injection of the same amount may be required in two hours. S. Weinmann has used pantopon in this manner in 40 cases, usually during the period of dilatation, when the pains are strong. In 24 cases pantopon alone was employed, in the remainder scopolamine was also injected. The effect is usually apparent in 15 to 30 minutes and lasts 2 to 4 hours. The results are good if the injection is not made too late; thus some patients obtained considerable relief while others lost all sensation of pain, though the uterus contracted regularly. There were no disagreeable after-effects such as headache, nausea or vomiting, but only a stuporous condition from which the patient could always be readily aroused. The author is of the opinion that the best anesthetic for the period of dilatation of the cervix is pantopon alone, or in combination with scopolamine, but that for the period of expulsion of the head, chloroform in small amounts is generally preferable.—Muench. med. Woch.

Pleurisy and Insurance.

Bourgy says that pleurisies, the cause of which can be established, or such as are simply complications occurring in the course of other acute diseases, in a word, nontuberculous pleurisies, are not contraindications to acceptance for insurance, if the following conditions have been fulfilled: The cure is complete, as corroborated by freedom from signs and symptoms for a sufficient period of time. There has remained no sequel of the disease that may embarrass other organs in performing their functions. The same attitude should be adopted in regard to empyema, even though surgical interference has been necessary for effecting a cure. So-called essential or primary pleurisy, on the other hand, must be looked upon from a different point of view. It is usually due to tuberculosis, and the applicant giving a history of such pleurisy must be thoroughly examined with regard to any manifestations of tuberculosis. Personal and family antecedents, age, sex, surroundings at home, profession, habits, date of the pleurisy, etc., are the points which must be fully considered. Whenever there is any doubt it is always a good general rule to recommend postponing the acceptance of the applicant for a fairly long period of time.—Third International Congress of Insurance Physicians.

A Pleasant, Efficient Laxative.

The desirable qualities of a first-class laxative are efficiency and freedom from unpleasant taste. The lack of either to just that extent disqualifies the product for use in the treatment of chronic constipation. That it is difficult to find a palatable and efficient laxative in the same medicament is a pretty generally accepted fact. It is possible to do so, however, and Cascara Evacuant may be cited as proof of that possibility. This preparation is pleasant in taste, and in doses of 15 to 30 minims in water it performs its duty quickly and well, without incidental nausea or distress. That is why children rarely object to taking it, and adults prefer it to other preparations.

The product is manufactured by Parke, Davis & Co. and is procurable from any well-stocked retail pharmacy. To avoid confusion with other so called aromatic cascaras, however, it is well to specify clearly "Cascara Evacuant, P. D. & Co."

The Value of Medicopedagogical Treatment in the Care of Moral Anomalies.

Paul-Boncour says that there can be no doubt of the efficacy of the methods initiated by Seguin of treatment of mentally defective children. Every day the excellent results of this treatment are seen. But in cases of moral anomalies there is some question as to the value of committing such children to an institution with a certain hope of cure. The author believes that we shall get good results in those cases in which the moral anomaly is coincident with lack of mental development, but that in cases of moral anomalies in minds that are normal this treatment is liable to fail. Moral sentiments are not lacking in the mentally defective, they only require development and education; as their motor hyperexcitability is lessened and they become less unstable and impulsive their moral sentiments are increased, they learn to know good from evil, and to think about the results of their acts. There are congenital perversions of morality that do not result from intellectual insufficiency, and these children, while benefited by the regulation of habit, are not cured by it. They are true moral idiots. The creation of institutions for the treatment of young criminals is not goihg to be the solution of the problem of prevention of crime in all cases. Every case must be individualized and studied by itself.—Le Progres Medical.

The Value of Ipecac in the Treatment of Amebic Dysentery.

Walter J—, single, 34 years of age, mining engineer in Mexico for several years. Good habits, denies venereal history, health has always been good.

April, 1910, while at his work in Mexico, the patient was compelled to drink some surface water, and very soon after began to have slight pains through the bowels and some liquid movements, passing of blood, general weakness, loss of weight not very marked. He remained at his work a short time, and knowing something of tropical dysentery, he decided to come north for treatment. Before coming, however, he went to one of the local hospitals and received the treatment they used for common dysentery, the attending physician seemingly not recognizing the type of dysentery, and as a consequence, he obtained no relief.

He came to me as a patient in September, 1910. I suspected amebic dysentery as the cause of the trouble, but was not able to find the amebæ in the stools, although I had him in the hospital. I then referred him to one of the physicians in the Presbyterian Hospital and he remained at that institution about a week before the amebæ were found, although diligent search was made for them. When found he was put on quinine irrigations and after a few days of that treatment he was allowed to go home, and continued the treatment under my supervision. We tried to carry out the treatment in a faithful manner, and did so for several weeks, but results were not at all satisfactory, and he became very much discouraged. After a conversation with a representative of the Department of Experimental Medicine of Parke, Davis & Co., he suggested we try Ipecac (2½ Salol Coated Pills). The patient was then taken to the Evanston Hospital and the following treatment was instituted:

No food was given the patient for three hours, then a hypodermic of a quarter of a grain of morphine was given, and the patient put to bed and three ice caps used, one at the nape of the neck, one across the throat and one over the epigastrium, and in half an hour 75 grains of the salol coated ipecac was given, the patient being instructed to remain absolutely quiet, not even being allowed to speak. A slight nausea followed in an hour, but at the end of three hours this had ceased enough to allow the taking of iced drinks (ginger ale, broths, etc.). No milk was allowed at any time. The dose of the Ipecac was reduced five grains each day, the other treatment being the same, until a dose of 15 grains of Ipecac was reached, and this dose contiuued for a week. By this time the bowel movement had been reduced from 15 a day to two or three a day, the stools becoming natural, and there being no pain or blood at any time. I might add that the nausea was not in proportion to the dosage, as the 15 grain dosage produced as much nausea as the 75 grain dosage. The use of the ice caps and the morphine seemed to be essential to the prevention of the nausea.

At the present time, June 1, 1911, nearly four months after the beginning of the treatment, results seem to be perfect, in that there has been absolutely no recurrence of the dysentery, blood in the stools or discomfort of any kind, and the permanent result seems to be complete, and the patient has gained 15 pounds in weight.—W. F. ALEXANDER, M. D., Evanston, Ill.

Lumbar Puncture.—The diagnostic value of lumbar puncture as been firmly established, but its therapeutic value is not so generally known. H. Curschman always punctures with the patient lying on his side instead of sitting up and iutroduces the needle laterally. For diagnostic purposes, 8 to 10 Cc. should be withdrawn; for therapeutic purposes enough to restore the normal pressure of 120 to 150 Mm. water. Lumbar puncture is indicated in all cases of acute and chronic meningitis, meningismus and non-inflammatory increase of fluid. Really marvelous results are seen in the so-called serons meningitis, no matter whether the fluid is normal or contains more albumen with lymphocytes in the sediment. The condition is analogous to edema in other parts of the body and is often cured by a single puncture. though the patient's condition may appear very alarming. Meningitis due to infiuenza is often cured by puncture and the same may be said of meningeal inflammation following erysipelas, though streptococcus meningitis secondary to ear trouble is less favorably affected, and the epidemic type of the disease usually also requires the injection of serum. Irrigation of the spinal canal with sublimate solution has been recommended in cerebrospinal syphilis. The results are least satisfactory in tuberculous meningitis, though a few cases have been reported cured. Some brilliant results have been published in internal hemorrhagic pachymeningitis. Lumbar puncture has also been tried in a variety of other affections, such as gastric crises, chorea, epilepsy, tetanus, incontinence of urine, Meniere's disease, itching dermatoses, etc. The author could see no good effects in uremia, probably because the exudation is cortical and parenchymatous. The small operation is usually harmless, yet care is in place, particularly in nervous and hysterical patients. There is only one condition where lumbar puncture is serious and may be followed by sudden death, namely, in tumors of the posterior fossa. The high pressure will drop suddenly and the patient may become deeply cyanotic and cease to breathe while the heart will continue to beat for some time. The tumor is usually in the cerebellum or in the neighborhood of the aqueduct and the fall of pressuse resulting from lumbar puncture will force it against the foramen magnum or fourth ventricle. In rare cases, there may be a hemorrhage into the tumor.—Therap. d. Gegenwart.

W. B. Saunders Company have just issued a new (16th) edition of their Illustrated Catalogue which describes some forty new books and new editions published by them since the issuance of the former edition.

The books listed in this catalogue cover every subject of interest to the medical man. The descriptions and illustrations are such as to enable the reader to select easily just the book he wishes on any branch. It is really an index to correct medical literature —an index by which the practitioner, ths surgeon, and the specialist can acquaint himself with what is new in the literature of his subject.

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State Board Examination Questions of Vermont.

ANATOMY.

1. Describe the tibia.
2. Describe the radiocarpal articulation.
3. Name the extensor muscles of the leg.
4. Describe the pericardium.
5. Give the origin and course of the pulmonary arteries.
6. Give the origin and distribution of the ulnar nerve.
7. Name the sinuses communicating with the nasal fossa.
8. Give nerve and blood supply of rectum.
9. Describe the mesentery.
10. Give location of Cowper's glands, and state where their ducts empty.

BACTERIOLOGY.

1. Give requisites for spore formation.
2. Describe some of the vital actions of bacteria.
3. What are mordants?
4. Describe a cover-glass preparation.
5. State the effect of antitoxin on bacteria.

PHYSIOLOGY.

1. Describe ciliated epithelium and (a) state where it is found most abundantly; (b) what is the function of ciliated epithelium?
2. Name some of the bodily states which lessen the alkalinity of the blood.
3. What is the office of the columnæ carneæ?
4. What post-mortem tests should be applied to prove that air has entered the lungs of a supposedly still-born child?
5. Describe the functions, and secretions of the stomach.
6. What is the function in digestion of (a) saliva, (b) bile?
7. How do the products of digestion find their way into the blood?
8. What is the cerebrospinal system of nerves, and to what parts of the body are its fibers chiefly distributed?
9. State where in the human economy the following substances are found: 1. fibrin; 2, mucin; 3, chondrin; 4, leucin; 5, hippuric acid.
10. Name the structures in the body whose functions are doubtful or unknown.

HYGIENE.

1. Into what general classes are foods divided? Give examples of each.
2. Describe the physiological action of alcohol.
3. What hygienic precautions should be observed by a pregnant woman?
4. If a chemical analysis of water revealed the presence of nitrates and nitrites (a) would this condemn it for drinking purposes? (b) If so, why?
5. Describe the preparation of patient, surgeon, instruments, and surroundings for operative procedures.

MATERIA MED.CA AND THERAPEUTICS.

1. How do tinctures differ from spirits? Give an example of each.
2. State the sources and dose of salicylic acid.
3. What is the best solution for hypodermyoclsis?
4. Give the therapeutic uses of boric acid.
5. Describe the therapeutic uses of glycerin.
6. Define expectorant. Mention three expectorants and state dose of each.
7. What is animal, and what vegetable charcoal? Explain their use in medicine.
8. Mention four drugs considered among the best tonics, and describe their actions
9. Name the digestive ferments used in medical practice, and give their sources and therapeutic action.
10. What are useful drugs to allay mucous irritation? Explain their action.

CHEMISTRY.

1. What relation has chemistry to the practice of medicine?
2. What are the principal varieties of thermometers? Describe their differences, and explain the transposition of the scales.
3. Give the physical and chemical properties of urine.
4. How are soaps made? What constitutes (a) hard soap; (b) soft soap; (c) castile soap?

5. Define specific gravity, atomic weight, reaction, re-agent, and water of crystalization.

PRACTICE OF MEDICINE.

1. Give the synonyms of relapsing fever and how mav it be diagnosed?

2. Name six infectious diseases in which the specific organism has been isolated and six in which it has not.

3. (a) What are your ideas as to complete or partial quarantine in the diseases mentioned in your reply to Question 2? (b) Give your reasons.

4. What have you been taught as to the medical treatment of appendicitis?

5. What mav be done for non-obstructive constipation other than through medicines?

6. What are the etiological factors of jaundice?

7. Write a short article on purpura hæmorrhagica.

8. Of what use in diagnosis are blood pressure tests?

9. Give treatment for general progressive arteriosclerosis.

10. Will be to demonstrate use of certain instruments of diagnosis.

PATHOLOGY.

1. Discuss albuminuria.

2. Give pathology of nephrolithiasis.

3. What post-mortem changes are found in general paresis?

4. What is the pathology in infantile paralysis?

5. What is the theory as to the location of lesion in occupation neuroses?

OBSTETRICS.

1. (a) Name the generative organs of the female. (b) Describe briefly the uterus, giving its gross anatomy, relations to other structures in the pelvis, and its function.

2. (a) Define the term menstruation. (b) At what age does it appear? (c) What name is given to the period of life during which it appears? (d) At what age does it usually cease? (e) What name is given to the period of life during which it ceases?

3. (a) Name the bones which form the bony pelvis. (b) Give anteroposterior diameter of the brim. (c) Give transverse diameter of the outlet.

4. Upon what signs and symptoms would you base a diagnosis of pregnancy before the end of the third month?

5. (a) What is the normal duration of pregnancy in days? (b) What is the limit of its duration from a medicolegal point?

6. (a) How frequently would you examine the urine during pregnancy? (b) To what constituents, normal or abnormal, would you pay particular attention? (c) In the presence of edema of the face, hands and legs with albumen and casts in the urine, all of which increased in spite of proper treatment, what symptoms would lead you to bring on artificial labor?

7. Write a short article discussing the terms asepsis and antisepsis as applied to obstetrics.

8. Describe your attentions to the child from the time the head is born till it is delivered to the nurse, including the tying of the cord.

9. (a) What are the symptoms of impending eclampsia? (b) How would you treat them? (c) How would you treat the developed condition?

10. How would you guard against the occurrence of post-partum hemorrhage?

GYNECOLOGY.

1. Define the terms subinvolution, rectocele, pyosalpinx, cervicitis, metritis, vaginismus.

2. Describe the technique of catheterization.

3. What are the most common causes of sterility?

4. Give differential diagnosis between a small fibroid of the uterus and early pregnancy.

5. What are the dangers attending the use of the uterine sound?

SURGERY.

1. Give the symptoms of perinephritic abscess and describe the operation for its relief.

2. Diagnose tuberculosis of the hip-joint and give the treatment.

3. Mention the conditions requiring trephining of the skull. Describe the operation.

4. Diagnose gangrene, naming the different causes, and describe its management.

5. Classify ulcers of the leg and give treatment.

6. Give the symptoms and pathological anatomy of whitlow. Give the treatment.

7. Describe the symptoms of a perforating ulcer of the duodenum and give the surgical treatment.

8. Describe branchial cyst and the operation for its relief.

9. What are the symptoms of chronic ranula?

10. Mention the causes of post-operative ileus. Give the treatmeut for its relief.

LEGAL MEDICINE.

1. Mention the different signs of death and give methods for applying them.

2. What considerations would govern you in pronouncing death due to exposure to cold?

BRONCHIAL COUGHS

and other respiratory affections so often owe their intractability to malnutrition and debility that vigorous tonic medication always forms one of the first and most important indications for their treatment. The results that uniformly follow the use of

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Composed of volatile and non-volatile substances, Listerine is a balsamic antiseptic, refreshing in its application, lasting in its effect.

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3. Describe the post-mortem appearances in death due to strangulation.

4. Mention means for detecting malingering in alleged cases of injury.

5. Differentiate the following: Hallucination, illusion, delusion, paranoia, paresis,

A Pure Lecithin Preparation.

There is no doubt that pure lecithin has a decided influence in various disorders where a general stimulus to the system is needed, as in tuberculosis, anemia and in diseases of the heart and the nervous system. J. Nerking points out that there are many lecithin preparations on the market, but that the majority of them are impure. To obtain the best effect, the preparation should be free from cholestrin, which often has the opposite effect, and should also be free from fatty acids and other acid substances which will cause a rapid decomposition. Vegetable lecithin is obtained pure with much greater difficulty than the animal product and is probably not identical with it. The author states that many widely advertised products contain only 70 per cent. pure lecithin and are physiologically almost inert. Recently, E. Merck has placed a product upon the market which must be regarded as exceptionally pure. It forms an absolutely clear solution with alcohol or ether, and contains almost 100 per cent. lecithin. Since the taste is somewhat oily and not always pleasant for delicate patients, it is incorporated with cacao in the form of a very palatable, 10 per cent. lecithin-chocolate. For children, bonbons containing each 0.25 Gm. of lecithin are recommended. For subcutaneous injections in severe cases, a 10 per cent. emulsion in physiological salt solution is offered, ready for use in sterile ampoules. The author has used the preparations in a large number of cases of anemia, chlorosis, neurasthenia, tabes, etc., and has always observed a marked improvement. The author concludes that lecithin (Merck) is the purest lecithin preparation at present on the market. The dose of the chocolate is three teaspoonfuls daily for adults and two teaspoonfuls for children. For injections 2 to 5 Cc. of the emulsion are generally employed.—Allg. med. Zentral-Zeitung.

Needlessly Blind.

There are estimated to be one hundred thousand blind persons, old and young, in this country. Not less than five hundred of these live in North Carolina. Had it ever occurred to you, gentle reader, that at least seventy-five to one hundred of these need not have been blind—ought not to have been, and would not have been—if proper precaution and preventive measures had been employed immediately after their birth?

"What blindness means to an intelligent, capable man or woman," to quote the words of a blind man who has, in the face of heavp odds, taken his place in the world with signal success, "is something which only the Lord and the devil and those who endure it know anything about; in their blackest nightmares those with sight cannot even imagine it." That it is possible to prevent much of such anguish seems not to have dawned upon the average citizen. Is such ignorance and indifference not criminal, positively wickedj Then who is responsible?

From one-fourth te one-third of all blind children lose their sight from what is usually called "sore eyes," "inflammation." etc. This is really "ophthalmia neonatorum," a germ disease, which can be cured if taken in time and the proper remedies used. These remedies should be applied as soon as the child is born, whether any signs of inflammation are discovered or not. The remedy will do no hurt; it may save your child's sight.

If the eyes, nose, mouth and ears of every new-born babe should be thoroughly washed immediately after its birth in a weak solution of boracic acid (borax water), one drop of a solution of nitrate of silver, not stronger than one per cent., put in the eyes, and the child thereafter kept clean, blindness among children in our State would be reduced at least twenty-five per cent. Do you realize what that would mean to the one hundred homes in North Carolina in which there are children "needlessly blind?"

And are you aware what it would save the State financially to thus protect the sight of all such children? Not less than $20,000 a year. Is it not worth the effort? Then does it not behoove every one to do all in his power to spread the information and seek to bless the homes into which the little ones come? Let every mother heed this warning and preserve the sight of her child.

John E. Ray,
Principal State School for the Blind,
Raleigh, N. C.

Intranasal Lupus.

The local application of iodine to lupus of the mucous membranes is known to give excellent results in some cases. The difficulty is that the applications can only be made by the physician or nurse from time to time and the treatment is, therefore, intermittent. The author has made use of Pfannenstiel's new method of treatment, by which this difficulty is overcome, and believes that if the details of the method are carefully followed it is of great utility.

The treatment depends upon the fact that, in the presence of ozone, iodides are decomposen and free iodine is liberated. The patient is given 45 grains of sodium iodide per diem, divided into six doses given at regular intervals. Every morning the nasal cavity is thoroughly cleansed of crusts and scabs by the nasal douche containing some sodium chloride and a mild antiseptic, such as boric acid. After drying. a tampon of sterilized gauze is inserted, care being taken that it lies in contact with the affected parts. Fortunately, in most cases the ulceration is in the inferior meatus and well within reach, the commonest sites being the septum, where a perforation often exists, and the inner wall of the ala. The patient is provided with a small bottle of a two per cent. solution of hydrogen peroxide, with which he constantly keeps the tampon moist He is instructed that he will know when the tampon is saturated by the fact that the solu tion will trickle back into the pharynx. Free iodine is thus liberated in proximity to the lesions, through the action of the peroxide upon the iodide excreted by the nasal mucosa. In some early cases the ulceration heals in a week or ten days; more usually a fortnight or three weeks' treatment is necessary.—Sequeira, British Jour of Dermatology.

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Some Cases of Lesion of Cauda Equina.

Cedrangolo presents of study of five cases of lesions of the cauda equina, which study has a bearing on the localization of such lesions within the spinal canal. Two tracts may be distinguished in the cauda equina; a medulloradicular, corresponding to the ninth and tenth dorsal and first and second lumbar vertebræ; and a radicular corresponding to the vertebæ from the second lumbar to the second sacral. If the first segment from the lowest be injured, the first radicular segment, there results an anesthesia and paralysis equal to that caused by a lesion of the medullary segment of the same number. For every clinical form of lesion of the cauda equina one must determine whether the lesion is of the root or of the medulloradicular segment. The conus is above the filum terminale and extends upward to the constriction of the lumbar swelling that is, to the level of the fifth sacral root. In the conus are the centers of the bladder, of the rectal nerves, and of ejaculation and erection, and the center of the Achilles tendon reflex; here also start the motor fibers for the levator ani, the bulbocavernosus and ischiocavernosus, the detrusor and sphincter of the bladder. and the anal sphincter, finally the anal sphincter; finally the sensitive fibers for the bladder rectum; perineum, scrotum, and sacrogluteal folds. Hence a lesion of the conus will cause disturbances of the sphincters; first, retention of urine and later incontinence of the bladder and rectum. In the genital sphere erection is completely abolished, and ejaculation is varied between partial and total absence of the orgasm. Also there occurs anesthesia of penis, scrotum, perineum, or anus, according to the degree of the lesion. Above this segment is the epiconus, a lesion of which causes disturbances of the sacral plexus, and sensorymotor paralysis of the peronei or sciatic nerves. In every case one may localize the lesion by the presence of some of these characteristic. symptoms. The study of the reflexes is important. Every skin is innervated by three root, and anesthesia of any region must be caused by lesions of one root and also of the roots above and below it. The author analyzes his cases and shows how each set of symptoms may be referred to a definitely localized lesion or symptoms may be referred to a definitely localized lesion of some part of the conus or epiconus.—Giornale Internazionale delle Sciencze Mediche.

Pruritus Vulvae.

Pruritus vulvae is very often associated with disturbances of the digestive tract from improper feeding, for it has been been found that the circulation in the blood of certain poisons resulting from intestinal putrefaction may render the nerve endings particularly sensitive and susceptible to ocal irritation. The suffering which patients thus afflicted undergo is often pitiful in the extreme. especially since the private nature of the affection many times keeps them from seeking prompt and appropriate treatment. Aside from the effect of these aggravated forms of pruritus on the general health, it is evident that involuntary or uncontrollable efforts to obtained relief by scratching or rubbing are extremely apt to prouce abrasions and raw areas that may become infected and lead to very serious infections.

Treatment should be instituted at once and followed with the utmost care and thoroughness.

It will be apparent that measures for relief divide themselves into twe parts: first, general, second, local.

General treatment naturally comprehends removal so far as possible of all predisposing causes, such as gout, rheumatism, diabetes, syphilis- etc. Likewise the correction of any digestive disturbances. Where the patient's general health is below par, tonics and suitable measures of a reconstructive character should be employed.

Local treatment consists essentially in the correction of any vaginal disorders, the careful removal of all irritating discharges and the establisment of the most fastidious cleanliness. Ulcers of the cervix should receive appropriate treatment and the most painstaking efforts directed toward the removal of any abnormal conditions. The medical attendant will usually find it necessary to advise frequent douching, and the frequency, quantity, and character of these douches will be defined by the special needs of each individual patient. In addition to measures for removing discharges and assuring cleanliness local applications will always be necessary to allay and overcome the severe itching. Of the many different local remedies that have been suggested there is none that will be found so promptly effective and so satisfactory from every standpoint as K-Y Lubricating Jelly. As a matter of fact, the relief that is obtained when K-Y is liberally applied to an itching area is often little less than astonishing: It seems to have some unique soothing. sedative and cooling effect on the skin and the nerve endings that enables it to allay the most severe itching. It is not merely temporary in its effect moreover, for unlike many other remedies, it does not lose its efficacy on continued use. It quickly reduces congestion and then seems to impart some tonic influence to the sensistive tissues which makes them less susceptible to local irritation. Where the parts have been sore and raw from scratching, K-Y Lubricating Jelly acts as a prompt healing agent, after it has effectively overcomes all smarting and burning. The medical attendant will find, therefore, that K-Y Lubricating Jelly is the most useful and efficient emollient that can be recommended for these cases of pruritus vulvae. Not only does it deserve constant use because of its marked antipruritic properties, but it has the further advantage of being non-greasy, colorless and water soluble. It never strains, discolors or soils the bed clothing. dressings or wearing apparel. Consequently, it is the most cleanly and pleasant local application that can be used for the class of cases under discussion. The more it is used, the more useful it becomes and it is no exaggeration to state that it is the most dependable and useful anti-pruritic emollient and soothing local agent at the command of the profession.

Santyl in Affections of the Bladder and Urethra.

The superior action of balsams in affections of the bladder and urethra is well known, but unfortunately there frequently are after-effects on the part of the gastrointestinal tract and kidneys. All the preparations recommended have been tried by W. Mehlhorn, but have proved unsatisfactory with the exception of sautyl, a pale oil with a slight balsamic taste, which corresponds chemically to the neutral salicylic ester of the oil. It may be employed as such in gelatin capsules 0.4 Gm., or in tablets containing santyl 0.4 Gm. with the same amount of magnesium carbonate. The 250 patients treated suffered from gonorrhea, uretbritis, cystitis, caruncle of the urethra, dysuria, tenesmus of the bladder, either nervous or inflammatory, periodical vesical distress during menstruation, neurasthenic bladder disturbances, etc. The oil is usually readily taken by the patients in water or on sugar (25 drops three times a day) after meals. In not a single case was there any gastro-intestinal or renal disturbance except, rarely, eructations. In cystitis, the drug is preferably prescribed with folia uva ursi and a careful diet should be ordered. The therapeutic results were excellent and a recurrence of the symptoms was noted only in hysterical disturbances. In vaginal operations, where blunt dissection of the bladder is often necessary, the patients will urinate more readily and will rarely complain of bladder symptoms if santyl is given the first few days. Good effects were seen even in chronic purulent cystitis and carcinomina of the bladder.—Zentralbl. f. d. ges. Therap

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The need of many children for cod-liver oil has been met with marked success by Hydroleine. They take it willingly; they—as well as adults—like its distinctive nutty flavor. Hydroleine is also exceptionally digestible. While its scope of usefulness is widened by its palatability and digestibility, it is always notably dependable.

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Treatment of Mercury Bichloride Poisoning.

The fatal dose of bichloride is usually about 3 grains, and the effects are quite typical. Nausea and vomiting, sometimes of necrotic tissue and blood, are usually the first symptoms, soon to be followed by colicky pains and diarrhea. The kidneys and heart are soon injured, the urine will contain large amounts of albumin, and sudden death may occur from heart failure or uremia, usually after a number of days. The treatment calls for early gastric lavage unless there is fear of perforation. Milk and albumin are recommended, with a view to forming an insoluble compound in the gastro-intestinal tract. It s probable, however, that this compound will also be slowly absorbed. There is thus no real antidote, but the suggestion of W. Meyerstein is a good one and is worth testing. This author found that if colloidal silver is mixed with a solution of bichloride, there will be a rapid and complete precipitation, and the supernatant liquid will be free from mercury, especially if the experiment is conducted at body temperature. A number of animal experiments were conducted and it was found that rabbits, treated first with bichloride and then with collargol, survived longer than those receiving bichloride alone. If a non fatal dose was employed, there was less pronounced albuminuria and fewer toxic symptoms if collargol was also given, particularly if administered several days in succession. Some of these animals were killed and the pathological changes in the kidneys and intestines were much less advanced than in control animals. Further experiments demonstrated that the neutralizing effect of colloidal silver is excited only in the intestines and not in the blood stream, for collargol injected intravenously after oral bichloride poisoning had no beneficial influence. It is probable that the bichloride is not all absorbed at once, so that a certain amount will be rendered innocuous by collargol given several days after poisoning and that some of the mercury is also excreted through the gastro-intestinal tract or the bile and then prevented from being reabsorbed, for collargol by mouth will also influence to a certain extent bichloride poisoning by the intravenous route. It is possible that other colloidal metals will have a still better effect.—Muench. med. Woch.

Hypophysary Opotherapy.

H. Pater says that the idea of the internal secretion of certain glands explains many clinical, therapeutical, and experimental facts otherwise hard to understand. The administration of the extract of one of these organs exaggerates or modifies the work of other organs of different names, and exalts the work of those of the same name. An opotherapeutic product has always two actions; a direct and an indirect action. With direct action we fight against hypophysary insufficiency; in indirect opotherapy we struggle against pluriglandular insufficiencies. The experimental action of hypophysary extract is double; first on the hypophysis of the animal treated; second on other organs of its body. The extract of the entire hypophysis causes an increase of arterial tension, slowing of the pulse, and increase in the amplitude of the heart beats. A series of injections of this substance causes a hypertrophy of the hypophysis, congestion, abundance of eosinophiles, presence of much extra-cellular colloid material, and a secretory hyperactivity. The thyroids show a prolonged vasoconstriction, lessening of substance and of secretion. The suprarenal capsules have an exaggerated action; undergo hypertrophy and hyperplasia. The kidneys present vasodilation and polyuria. Disease of the hypophysis causes acromegaly. The extract of hypophosis may be used therapeutically to raise arterial tension, slow the pulse, increase diuresis, prevent painful feelings of heat and sweating, increase appetite and sleep, lessen asthenia, and psychic troubles, increase the development of the bones and muscles, and play an antitoxic role. Its uses are substitutive in case of imperfect function pf the hypophysis; it may be used to increase resistance in a series of serious infections, typhoid, diphtheria, pneumonia, etc., where the myocardium fails and there appears an acceleration of the pulse, lowering of arterial tension, lessening of kidney secretion, etc. It is useful in acute and in chronic cardiopathies, in nervous tachycardia, in insomnia with hypotension, in uterine hemorrhages, in intestinal atony, and in surgical shock.—Bulletin General de Therapeutique.

Edema of the Eyelids in Children.

In discussing various difficulties of diagnosis encountered in children, the author calls attention to the fact that there are four conditions in which this symptom may be met with. The first two are chronic nephritis and the rare cases of congenital edema of the lids. The condition is also an early symptom of rheumatic pericarditis. In fact, it often appears before any other sign, unless it be an increase in the rapidity of respiration. In the three conditions just mentioned the edema is more marked in the upper eyelids, but in a fourth condition, whooping-cough, it is more often in the lower lids. As it appears sometimes before the cough it may be of assistance in the diagnosis. The author tells of the case of a boy brought to him because of loss of appetite, and who had no cough, but exhibited the symptoms above mentioned; a week later he developed the characteristie whoop. —Thursfield, Birmingham Medical Review, Birmingham, England.

The Pancreatic Syndromes in Tuberculosis.

M. Lœper states that tuberculosis is frequently accompanied either by pancreatic insufficiency or by pancreatic hypersecretion. The most frequent sign of the former is diarrhea. The latter is not infrequent at the beginning of tuberculosis. Tuberculosis may lead either to sclerosis, degeneration, atrophy, or inflammation of the pancreas, or to hyperplastic reactions, which are well marked not only in the lobules but also in the islets of Langerhans. From a practical point of view the author recommends what he calls "the intensive pancreatization" of tuberculous patients and states that in many cases of tuberculosis in which sclerotic or degenerative changes of the pancreas have followed hypersecretion the stimulation of the pancreatic secretion has given him very satisfactorp results.—Progres Medical.

The Serum Treatment of Cerebrospinal Meningitis.

A. Papapanagiotu describes his results in the treatment of fourteen cases of cerebrospinal meningitis in private practice with the anti meningococcus serum. The patients, from the ages of eight months to ten years, all recovered. It is unusual for children undes one year of age to reastonishing. The cases all occurred in the winter months and all were treated at their homes. The author believes that the patients themselves as soon as they are isolated became comparatively harmless, since no two cases occurred in the same family. The attendants of the patient are to harbor the meningococci in the nasopharynx and to become dangerous carriers of the disease The injections of the serum should be given as early as possible in order to get the best results, and may need to be repeated three to four times. The amount given should be 30 c. c. after the age of two years and 10 to 20 c. c. in younger children. The fever at once subsides and all the general symptoms are relieved. The best evidence of the improvement is seen in the fact that the cerebrospinal fluid becomes less turpid. —Archives de Medecine des Enfants.

Danger Due to Substitution.

Hardly another of all the preparations in existence offers a wider scope to imposition under the plea of "just as good" than the scientifically standardized Eucalyptol.

The most recent fraud practiced in regard to this product is an attempt to profit by the renown of Sander & Sons. In order to foist upon the unwary a crude oil, that had proved injurious upon application, the firm name of Sander & Sons is illicitly appropriated, the make-up of their goods imitated, and finally the medical reports commenting on the merits of their excellent preparation are made use of to give the desired lustre to the intended deceit.

This fraud, which was exposed at an action tried before the Supreme court of Victoria at Melbourne, and others reported

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before in the medical literature, show that every physican should see that his patient gets exactly what he prescribed. No "just as good" allowed.

Rheumatism.

There are few diseases in which Iodia is more serviceable than rheumatism. In some of the chronic types, characterized by the depressing joint affections that make life a burden, Iodia will be found well-nigh specific. It relieves pain and soreness in a manner quite remarkable, and gives the patient more comfort than has been known for months. Likewise. many of the myalgic forms respond at once to Iodia, and lumbago usually clears up rapidly under its use. Iodia does not conflict with other anti-rheumatic remedies. On the contrary, it is a powerful synergist and greatly augments the action of the salicylates and similar remedies. Iodia should be given in two teaspoonful doses three or four times a day.

A Method of Diagnosticating Malaria Long After its Cure.—Thomson (Annals Trop. Med. and Parasitol.) has made many daily observations of the total and relative leucocyte counts in malaria extending over long periods of time and after the patients were apparently cured. His findings are remarkable and unique. They are accompanied by numerous charts. The summary in Thomson's own words, follows: (1) During active malaria the number of leucocytes in the peripheral blood is decreased. During quiescent malaria and in cases apparently cured by treatment, the leucocytes in the peripheral blood are much increased. (2) During the rigor and temperature in malaria the mononuclear leucocyte percentage (more especially that of the large mono-nucleated variety) is low. With the fall in temperature, however, the mononuclear percentage rises very high, sometimes even to 90 per cent. of the total leucocytes. This fluctuation in the percentage of total mononuclear leucocytes occurs also long after continuous quinine treatment and is observed for months and even years after the last attack of fever. (3) In these apparently cured cases of malaria the mononuclear percentage is lowest at the time of the day at which the rigor and fever occurred during the previous active malaria; and moreover, at this time there also occurs a very marked leucocytosis, which continues only for a few hours. The leucocytes reach numbers as great as 30,000 to 50,000 per c. mm of blood. On one occasion they were as numerous as 125,000 per mm. Two hours later they had fallen to 22,000 per c. mm., and in eight more hours they were only 6000 per c. mm. This case showed a regular daily periodic variation in the number of leucocytes, averaging from about 6000 per c. mm. to 50,000 per c. mm. The height of the rise always occurred about noon. This was the time at which the rigor and fever, which was quotidian, were wont to occur previously. This post-malarial leucocyte phenomenon occurred always without exception in the 40 cases examined and would therefore seem to be an infallible sign of previous malaria, as, so far, it has not been observed in any other disease. (4) It would appear that large numbers of malarial parasites on sporulating cause a leucopenia while a very small number on sporulating cause a leucocytosis.

The Problem of the Verminous Scholar.—Macdonald, in the Journ. Roy. Instit. Public Health, says that the problem of the verminous scholar is theoretically easy to deal with, but in practice its solution is most difficult. Medical inspection is, however, assisting in diminishing the numbers of such children. The Dr. suggests that measures should be (1) preventive, and (2) curative. Amongst the former he would place first cropping of the hair both in boys and girls. If girls must wear their hair long, then the hair should be tied in a "pigtail" behind, and not allowed to hang loose, and parents should be advised to see that the hair is combed each night, and the head washed once a week with soft soap. Teachers and parents ought to be encouraged to allow children to attend school bare-headed, or if they wear hats coming to, or going from school, the teachers ought to try to get them to go without hats during the play hours at school. Each child should have its own peg in the cloak-room. There should be frequent inspections, by the school nurse, and following these inspections short lessons on the importance of keeping the head clean, especially to the older girls, might be given by the teacher or school nurse. Probably the hygienic education of the children, who may reasonably be expected to practice in after life some of the hygienic truths taught them in school, is the best solution of the problem. School baths provided more especially for promoting the general cleanliness of the scholars should prove an important adjunct in preventing verminous conditions. With regard to curative measures the author places foremost isolation—in slight cases by making the child sit apart from its companions, in bad cases by excluding the child from school until the condition has been remedied. As soon as possible the parent should be notified. This is best done by a visit from the school nurse. If parents fail to take steps to treat the condition then they should be threatened with legal proceedings, and if necessary they should be prosecuted. There are two ways of treating the children affected. They may either be treated at home or at a central cleansing station. The latter only is likely to be effective with the children of the poorer classes. For obvious reasons the homes ought to be disinfected at the same time.

Notwithstanding the large number of Hypophosphites on the market, it is quite difficult to obtain a uniform and reliable Syrup. "Robinson's" is a highly elegant preparation, and possesses an advantage over some others. in that it holds the various salts, including iron, quinine and strychnine, etc., in perfect solution, and is not liable to the formation of fungus growths. (See page XIV this issue.

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The attention of the physicians and surgeons is called to the advantages which this institution offers in methods of laboratory diagnoses.

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To the physicians and surgeons of the Carolinas and Virginia, the Charlotte Sanatorium Laboratory offers, at moderate cost, facilities for such examinations. Animal inocculation, chemical, bacteriological and histological examinations will be made as the case requires.

The following directions are suggested for the benefit of those who may forward material for examination.

All specimens should be accompanied by a brief note descriptive of the clinical condition and a special reference to the character of the examination desired.

Seventh Street Entrance.

The name and address of the person to whom the report is to be sent should be clearly indicated.

Sputum—should be sent in a clean, wide-mouthed bottle. The ordinary vaseline bottle answers all purposes. The morning sputum is preferable. That expectorated during meal time should not be included.

Blood For Widal Test. — After carefully washing, prick the lobule of the ear or the tip of the finger. The first drop of blood should be wiped away. Two large drops are then placed on a glass slide, one near either end, and allowed to dry without being spread out on the suface of the slide. After they have dried, the

slide is carefully placed in a clean envelope and box, and then mailed to the laboratory.

Second Method.—Collect three or four drops of blood in a capillary tube; then seal tube over gas or other flame and send to the laboratory. (Capillary tubes will be sent upon application to the laboratory.) Blood for malarial parasites differential count. etc., should be sent to the labaratory on glass slides. As thin a smear as possible should be made.

Clinical Laboratory, Showing Arrangement of Desks, Miscroscopes, Microtomes, Incubator, Centrifuge, Etc

Smears For The Detection of Gonococci.—One drop of purulent discharge from the urethra should be placed at one end of a clean slide and a thin smear made overthe surface of the slide.

In collecting a specimen from a female patient, care should be taken to obtain the drop of material directly from the seat of the discharge. This should be done with a sterile swab or other instrument. Two smears should always be sent to the laboratory.

Clinical Laboratory, Showing Autoclave, Hood, Operating Tables, Etc.

Urine.—for bacterioligical examination should always be catheterized directly into a bottle that has been rendered sterile by boiling 15-20 minutes. No chloroform or other preservative should be added. When sending a specimen of urine to the laboratory, always mark it with the date, the name of the patient and of the physician for identification, and specify whether a chemical or bacteriological examination, or whether Ehrlich's diazo test for typhoid fever is desired. The quantity should not be less than four ounces.

Pathological·—material from either operation or autopsy should be wrapped in gauze moistened with salt solution surrounded by oiledpaper or rubber protective. When it is not possible for material to reach the laboratory within twenty-four hours it should be placed in alcohol (80 per cent) or formalin solution (10 per cent.) Small fragments of tissue and thematerial from uterine curettage should be preserved always.

Tumors.—can be sent by mailing in wide mouthed specimen jars. They should rest upon a pad of absorbent cotton, which is placed in thebottom of the jar before

the tumor is dropped in.

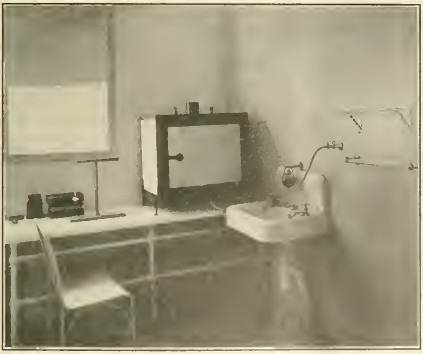
Feces.–should be sent in a clean, wide mouthed bottle. A large sterilized screw capped bottle will answer the purpose.

Wassermann's Test.–Since the advent of the discovery of 606 for the cure of Syphilis. the employment of the Wasserman test, both before and after its use, is conceded by all scientific investigators to be of the highest importance as a control to the curative effect of this remedy. The Charlotte Sanatorium Laboratory is specially equipped for carrying out this Wasserman Sero-diagnosis test for Syphilis.

(Clinical Laboratory. Showing Supplies, Working Table. Etc)

Specimens sent to the laboratory for this test should be obtained as follows.

1st. By using an ordinary antitoxin syringe. and withdrawing the blood directly from the median basilic vein, as represented in Fig. 1 illustrates tourinquet applied, taken the blood from the vein by means of the syringe


Clinical Laboratory, With Hot Air Sterilizer, Scales, Lavatory, Etc.

2nd. By means of capillary attraction, as illustrated in Fig. 11 represents empty capsule; tourinquet applied to finger. It is best to apply constriction to middle finger, and puncture the dorsal surface of the last joint of this finger rather close to nail with a sterile, and collect blood, as illustrated in Fig. 11.

After obtaining blood if capsule is used, as is shown in Fig. 11, simply place the curved end over a flame of a Bunsen Burner, alcohol lamp, or ordinary gas jet to seal same, and mail. If syringe or other means are employed, put blood in small test tude, allow to coagulate, cork, pack and mail as any other fraigle package. Atleast two C. C. should be withdrawn for this test. The syringe tubes, etc., should be clean and perfectly dry. It is the best, if possible, for patient to go to the laboratory and have the director of that department secure for himself the specimen of blood.

Milk.–The bacteriological examination of milk, requires certain precautions in the collection of the sample. Special instructions and proper containers will be sent upon application.

Stomach Contents.–should be sentin a sterilized bottle. Alarge vaseline or quinine bottle usually answers the purpose.

Fig I

Fig II.

The following table gives the cost of many of the examinations made in this laboratory:

Smears and Stains (tubercle bacillus,) gonococci, etc.	$1.00
Blood.	
Hemoglobin and Erythrocytes	1.50
Leucocytes	1.00
Differential	1.50
Malarial parasites	1.00
Complete analysis	3.00
Urine.	
Chemical	1.00
Microscopical	1.00
Complete analysis	1.50
Pathological Sections	5 00
Feces Examination	2 00
Blood Culture	5.00
Cultures and isolation of bacteria	5.00
Stomach Contents	2.00
Widal Test	2.50
Tissue Sections	5.00
Tuberculin Test	5.00
Wassermann's Test	10.00
Milk.	
Chemical	2.50
Bacterial	5:00
Water analysis, bacterial examination	5.00
Chemical examination including alkalimity, chlorides, ammonia, nitrites and nitrates	5.00
Quantitative analysis	$10.00 to 25.00
Culture Media (per tube)	.25
Sterilized tubes and pipettes	.15
Coagulation time	2.50
Vaccines	10.00
Sterilized Tubes with swab	.50
Bacterial Cultures	1.00
Sterilized solution	5.00
Spinal Puncture and Analysis	5.00

☞ Address all specimen to the Charlotte Sanatorium Laboratory, Charlotte, N. C.

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Puerperal Psychoses.

Lucien Picque distinguishes among psychoses connected with pregnancy and the puerperal state between febrile states accompanied by delirium, which he considers to be always due to an infection of the uterus of more or less degree of severity, and the afebrile one. The febrile cases should always indicate an evacuation of the uterus and should be treated only in a hospital where surgery is done and not in an asylum. The uterine wound should serve as a line of separation between the psychoses of pregnancy and of the puerperal state. While there must always be a predisposition to mental trouble, still it is the results of infection that make the condition incurable. If the uterus is early excuated one may get a cure but if the condition of infection becomes chronic there shall get changes in the brain cells that will render the condition permanent. In the apyretic forms we generally observe meloncholia; in the febrile forms confusion, hallucinations and maniacal attacks. The apyretic forms should go to an asylum. the febrile to a surgical hospital.—L'Obstetrique.

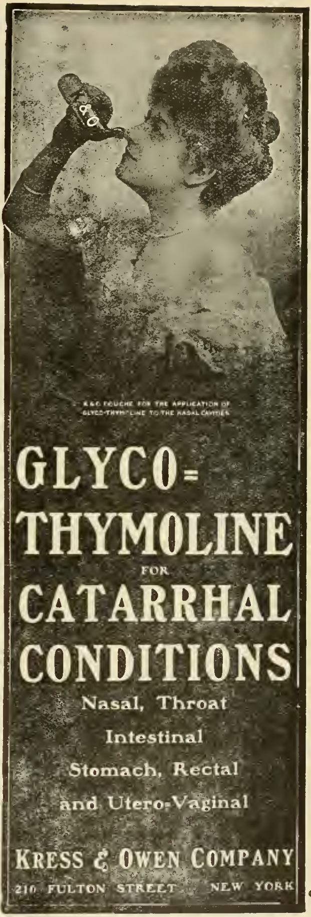
◆

Biological Treatment of Peritonitis.

By biological treatment of peritonitis F. Kuhn means the introduction of a certain amount of a syrupy solution of sugar into the peritoneal cavity. The sticky fluid will adhere closely to all the loops of the intestines and prevent the formation of adhesions. A still more important property of sugar, however, is exerted upon the colon bacillus, which is usually present in peritonitis, in that it directly opposes proteolysis and the formation of toxins. It has been known for a long time that a culture of the colon bacillus on a sugar medium is much less toxic than a culture on the ordinary media. In addition, sugar has distinct anti-bacterial properties and also stimulates the formation of anti-bodies on part of the organism. Certain physical and osmotic processes will also come into play and the formation of fibrin is considerably diminished. In practice, the author uses as an irrigating fluid in peritonitis a solution containing salt 0.9 and glucose 4.1 to 100 Cc. of water. It is probable that still better results will be obtained if, instead of irrigating, more concentrated solutions of sugar are merely injected into the peritoneal cavity. —Muench. med. Woch.

Treatment of Basedow's Disease.

Saenger lays down as a rule that every case of Basedow's disease should at first be treated internally, but if after a reasonable



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time the improvement is not so pronounced that the patient can resume work, the case should be turned over to the surgeon. The first principle in internal treatment is to create favorable surroundings and to send the patient to the mountains wherever possible. The diet should be non-irritating, preferably vegetables. Many drugs have been recommended but not one is infallable. Formerly, iron, quinine, atropine, ergotin and arsenic were popular. Kocher prescribes sodium phosphate 2 to 10 Gm. daily, while Ebstein mainly treats the coprostasis. The cardiac disturbances are not benefited by digitalis unless some myocarditis is present. Very good results have been seen by the author from the use of antithyroidin (0.5 to 2.0) and rodagen (5.0 to 20.0), while preparations of other ductless glands, as the thymus and hypophysis, are generally ineffectual. Thyroid preparations are distinctly contraindicated, as they will usually aggravate the condition. A large percentage of patients are benefited by rest and forced feeding alone. The surgical treatment is discussed by P. Sudeck, who states that the mortality has now been reduced to 1½ to 5 per cent., while probably 75 per cent. or more of the patients are absolutely cured. The figures will be still more favorable if the cases come to operation sooner. When there is marked tachycardia and cachexia, the patients should be treated internally for some time, as the greatest post-operative danger is failure of the heart. This danger is also present if local anesthesia is employed, but more favorable conditions can be created by first giving veronal or a subcutaneous injection of pantopon.—Muench. med. Woch.

A New Surgical Dressing.

Excellent results have been obtained by Stumpf from the use of sterilized bolus alba in all infected wounds or wounds liable to infection. The sterilized powder is now supplied sewed up in bags of various sizes, so as to fit any part of the body. Clean wounds will heal rapidly without any reaction and infected wounds will rapidly become clean. In more severe phlegmons, it is advisable to make free incisions so that the powder can act upon many parts at once. Where the wound is already crusted over, the bolus bag may be moistened with boiled water, for the powder acts just as well when wet as when dry. A frequent change of dressing is absolutely necessary, and is the only disadvantage of this method of wound treatment. The dressing is indicated in large transplantations, and whereever it is imperative to increase the vitality of the cells and to ward off or combat infections. No specific action is seen in clean wounds where it is only necessary to stimulate the granulation. The addition of other drugs to the bolus is as a rule not necessary. —Muench. med. Woch.

Inversion of the Radial Reflex.

At a meeting of the Societe Medicale de-Hospitaux, Dr. Babinski reported an alterat tion in the radial reflex which he 'has me- with in a particular class of patients sufl fering from lesions of the cervical spinar cord. Normally, percussion of the inferior end of the radius brings about a simple flexion of the inferior end of the radius brings about a simple flexion of the forearm on the arm. When the tendon-reflexes of the upper extremity are well marked, other movements, especially that of flexion off the fingers, may accompany flexion of the forearm. This is generally the case in patients suffering from hemiplegia of cerebral origin. In the healthy individual, however, the fingers alone are never seen to flex as the result of a radial shock. But this sort of transposition of the normal reflex movement, which the author proposes to call "inversion of the radial reflex," occurs sometimes in certain pathological circumstances. He has met with it in patients suffering from lesions of the cervical spinal cord, including syringomyelia and tumors. and up to the present has never noticed it in affections situated elsewhere' He believes that this inversion of a radial reflex is the result of a lesion affecting primarily the fifth cervical segment. From his observations he concludes that this sign by itself is sufficient to prove that it may help in the localisation of the injury,— The Hospital, London.

Enlarged Tonsils and Crime.

The latest theory, which hails from Washington, is that enlarged tonsils are a frequent cause of juvenile crime. The opinion of so distinguished a criminologist as Judge DeLacy upon this subject is stated to be backed up by many leading members of the medical profession in Washington, one of whom, Dr, C. R. Dufour, of Georgetown University Hospital, is said to have examined a large number of mentally backward and incorrigible children and to have discovered in them the existence of enlarged tonsils and adenoids. Some of these were taken and the morbid growths were removed, after which considerable improvement began to show itself in their character and conduct. Any source of reflex irritation present in a child of neurotic or ill-balanced temperament cannot but react unfavorably upon its mental life, so that its removal might be expected to have

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a good influence in preventing the development of undesirably traits.—Medical Press, London.

Absorption From Muscles.

Meltzer has found that drugs injected into muscles are absorbed almost as rapidly as when injected directly into the veins. Thus epinephrin will cause an almost immediate and pronounced rise in blood-pressure when injected into the muscles, while after subcutaneous use there is hardly any reaction. The rule applies to both colloidal and crystalloidal solutions. Careful experiments showed that the rapid absorption was not due to the fact that the needle entered a vein. Absorption is very much better from the lumbar muscles than from the glutei, since the former consist of finger muscle bundles with less connective tissue, while with the latter the fluid only too readily enters the loose areolar connective tissue with which these muscles are abundantly supplied.

The author recommends that salvarsan be preferably given by injection into the lumbar muscles. He favors small doses given repeatedly.preferably in acid solution.

It is not likely that necrosis of muscular tissue is of common occurrence, but if it occurs, the lesion will probably heal rapidly.—Berl. Klin. Woch.

Rheumatism.

There are few diseases in which Iodia is more serviceable than rheumatism. In some of the chronic types, characterized by the depressing joint affections that make life a burden, lodia will be found well-nigh specific. It relieves pain and soreness in a manner quite remarkable, and gives the patient more comfort than has been known for months. Likewise. many of the myalgic forms respond at once to Iodia, and lumbago usually clears up rapidly under its use. Iodia does not conflict with other anti-rheumatic remedies. On the contrary, it is a powerful synergist and greatly augments the action of the salicylates and similar remedies. lodia should be given in two teaspoonful doses three or four times a day.

Fuel for the Body.

One of the best means of supplying the body with fuel is cod liver oil, for in it are the elements needed by the tissues to take the place of those lost in the phenomenon of energy-production. This is the reason that cod liver oil is widely resorted to for the purpose of restoring strength and energy to an organism, reduced in vigor as a consequence of a protracted illness. In the selection of a special preparation of the oil, the two determining factors should be: 1st, efficiency; 2nd, palatability; and since these two requirements are clearly met by Cord. Ext. Ol. Morrhuæe Comp. (Hagee), it is in a vast majority of cases the agent of choice. Cord. Ext. Ol. Morrhuæ Comp. (Hagee) contains in pleasant form the active principles of the oil, reinforced by the hypophosphites of soda and calcium, and may be ordered with every confidence in its power to charge the tissues with needed fuel.

Senile Pleurisy.

Oppenheim and Crepin state that among 2,000 old people they have observed 41 pleural effusions, 29 of which have been diagnosed during life, and 12 have been revealed by the post-mortem examination. Among the last 4 had died suddenly, without any premonitory sign or symptom. The average age of lhe cases considered was 70, and the condition was about three times more frequent in men than in women. Both sides seemed te be equally often affected. In the vast majority of cases the general condition was very poor. After a study of several typical cases the authors allude to the extreme severity of the disease and to the great frequency of sudden death. The death rate was 65 per cent. The only rational treatment of senile pleurisy with effusion, according to the authors, is paracentesis, which must be performed as soon as the diagnosis is made.—Progres Medical.

The Halsted Operation in the Treatment of Mammary Cancer.

Tournier advocates the use of the Halsted operation for the extensive removal of the structures in the axilla and the pectoral muscles, on account of the lessened likelihood of recurrence. The objections that have been made to this operation are that it is unnecessarily mutilating and causes disability of the corresponding arm and shoulder. The author thinks that this disability is more due to adhesions which form from immobilization of the arm during healing; and injuries to the posterior circumflex nerve while cleaning out the axilla in the dark. If the arm is allowed to be moved after operation and the nerve is looked for during the open operation this disability will be avoided. That these muscles are not necessary to the movements of the arm is shown by the perfect results obtained after their removal and when they are congenitally absent. The fact that recurrences are rare in these muscles and that the lympatics of the breast do not reach these muscles is not to be considered in this matter, since there are authentic casês in which re-

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currences have occurred between the pectorals in a few glands located there or in the interstitial connective tissues of the muscles.—Gazette de Gynecologie.

Paralysis of the Right Third Nerve Following Ethmoidal Operation.

Wright reports the case of a man, aged thirty-six, who was first seen in April, 1911, with a history of nasal polypi for about eight years. Following an intranasal ethmoidal operation on the right side he developed an orbital hematoma and complete right third nerve paralysis. The pupil is now, six weeks after the operation, smaller and reacting, and the ptosis is less, but the condition is otherwise unaltered. Vision of the right eye is unaffected.—Proceedings of the Royal Society of Medicine.

Experience with Styptol.

In former years the sovereign drug for all forms of uterine hemorrhage was ergot. Ergot has; however, steadily lost in popularity owing to inconstancy of action and a number of most undesirable after-effects. An excellent and efficient substitute, according to Magerstedt, is styptol. While ergot contracts the uterine muscle, styptol will slow the blood current and contract the vessels of the genito-urinary organs. The latter process is not painful and the general slowing of the blood streams is explained by a special sedative action peculiar to the drug. Chemically, styptol is the phthalate of cotarnin and it is probable that both components participate in its action. Disagreeable after-effects were not seen since the toxic dose is considerably higher than the therapeutic. The drug was employed 24 times after miscarriage (6 to 8 tablets). There never was any pain, the hemorrhage always ceased on the first day and the uterus contracted rapidly. It was also prescribed five times after artificial delivery; a remarkable feature here was the small amount of rhagic exudates should not be aspirated too early, but after expiration the insufflation of air is also indicated. It is probable that the introduction of air will also do good in the severe types of dry pleurisy.—Therap. d. Gegenwart.

Tetanus After Injections of Quinine.—Rigollet (La Presse Medicale) discusses the question of tetanus following hypodermic injections of quinine. In his opinion such a disaster is due to contamination, and not to any inherent fault of the drug. As Vincent has shown, if tetanus bacilli be injected soon after a hypodermic injection of an insoluable quinine salt has been given, the organisms will be found in the greatest abundance, not at the site of their own injection, but at that of the quinine; and probably this fact is due to the influence of the drug in paralysing leucocytosis The authore who reported cases of tetanus following quinine injection claim to have used the most rigid anti-and aseptic precautions, and attribute the disease to latent spores in the patient's organism, which developed as a result of the paralysing action of the drug. Owing to the general use of hypodermic injections in the quartan fever, it is important that some definite decision should be come to with regard to this method of administration. Rigollet, in attempting this, has investigated the original communications, and finds that in nearly every case abscesses were formed at the site of injection, through which the organism of suppuration and of tetanus could have gained admission. He therefore thinks that in all cases faulty technique was the cause of the disaster, an opinion which is strengthened by the fact that no case has been reported for several years in spite of the thousands of injections which are practiced annually. As, however, there is always a danger of an accident happening, he is of opinion that injections should only be given by a physician and with every precaution; the neutral chloride should only be used, as it destroys tetanus spores, and the fluid should be injected into the muscles and not subcutaneously.

Residual Urine in Old Men.—Miller (The London Practitioner) puts the question: Why should old men have residual urine, which, increasing and giving rise to retention, with a dilated bladder, ends in catheterism and perhaps prostatectomy? In discussing this query. he says that it is remarkable that this condition is usually found in men of advanced life and that the patients are somewhat feeble. It is true that the presence of an enlarged prostate may be a factor. That the last alone is not always responsible for the symptoms is borne out by the records of many cases in which the prostate is practically normal in size, and by the consideration that cases with enlarged prostates may have perfect control of the bladder.

He says that the use of the senile retention may be a deficiency of effort on the part of the patient, due either to laziness, impatience or indifference. Basing his method of treatment on this assumption, the author has been in the habit of advising such patient to make a special effort to produce complete voluntary evacuation. The Dr.'s results were remarkably good, so that the symptoms due to retention completely disappeared in a number of cases.

"overconfidence frequently begets carelessness, and as Spring approaches with its semblance of balminess so with it come those cases of Chest, Bronchial and Inflammatory Throat affections as a result of exposure from rushing the season.

The hot moist heat, most conveniently, agreeably and effectively applied in the form of antiphlogistine thick and hot, not only affords relief from pain but hastens resolution of inflammatory processes, is conceded by the sum total of clinical experience.

Chilling by exposure in frequent changing of dressings counteracts the beneficial effect of hot applications, but by the use of antiphlogistine the part may be kept for hours continuously under the influence of heat and definite results can be expected."

His conclusions are the following:

1. "Residual urine (in the absence of organic obstruction) is the result of not emptying the bladder thoroughly.

2. This is due to insufficient effort being made.

3. Residual urine can be got rid of by making another or greater effort to pass it.

4. The bladder can be thus trained to thoroughly and systematically empty itself.

5. As a result of this the patient is saved from the necessity of having to rise out of bed during the night, and may also be saved from catheter-life."

Obstinate Pruritus Cured by Excision of the External Organs of Generation.—Colė (New Orleens Medical and Surgical Journal) treated a case of obstinate pruritus by removal of the clitoris, the labia minora, and a part of the vestibule and labia majora, with immediate relief of symptoms. The case is reported four months after this radical procedure. In the particular case which he records the etiology is obscure. The general itching had lasted for three years with periodical exacerbations not particularly severe. The attacks grew more frequent, and six months immediately preceding operation the itching was almost constant and was intolerable, causing loss of sleep and a condition of profound despondency. Medical treatment and curettement had been perfectly futile.

Sterilized Milk as a Cause of Infantile Scurvy.—Jordan (Brit. Jour. Child. Dis.) reports a case of infantile scurvy due to sterilized milk. The case was an eleven months old baby presenting a history of having never been well, was wasting and always crying. It partook of but little food and never went but a few hours without vomiting.

On examination there were found to be no abnormal signs in the chest or abdomen, the spleen, however, being just palpable. There were slight signs of rickets. There was a very marked glossitis migrans, and it was while this was being inspected that an assistant catching sight of the lower gum, exclaimed "Why, it has scurvy as well." It was found that the only teeth cut were the lower central incisors, and that the gum was bluish and spongy about the left of these. In the upper jaw no teeth were erupted, but over the position of the central incisors were to be ssen two large, bluish, spongy masses.

Further inquiry elicited that there had been bleeding from the mouth, and that two weeks earlier orbital ecchymosis had been observed.

Iodival in Syphilis.—Pohlmann ash the question whether the rules which have hitherto guided us in treatment may not require revisal. Even after salvarsan has been employed it is generally held that mercurials given by inunction or injection can reach untouched foci, and a negative reaction is only obtained by Wassermann's test after this has been carried out. A further question is, What place does iodine treatment now hold in dealing with syphilis? Ehrlich is of opinion that probably iodine acts by fixation of the toxins and by favoring the discharge of bacterial products. As fresh toxines may be formed, it is desirable to keep the system under the continuous but mild action of iodine. Again, if through the medium of the thyroid gland the poison is eliminated, iodine in a form soluble in fatty media is preferable to iodide of potassium soluble only in water, and therefore necessitating the administration of large doses to get at fatty or nerve tissues. To attain the best therapeutic effects of iodine in syphilis a preparation should be prescribed in mederate doses, but which can be persevered with for some considerable time. Iodival fulfils these requirements most perfectly of all the newer combinations of iodine, and has this advantage over iodide of potassium, that its action while powerful is uniform, and it only becomes a solution capable of absorption in the small intestine, so that it does not irritate the stomach, which iodide of potassium is so apt to do. Iodival seems to have a specially good influence on nerve syphilis. A series of cases where it was well borne when iodide of potassium for various reasons proved unsuitable are related.

Nature of Eclampsia.—Zangemeister, in Dentsche Med Wochenschrift, is inclined to believe that puerperal eclampsia must be regarded as a sort of reflex epilepsy. Toxins he would consider rather as predisposing than exciting causes; that is to say, they do not believe like strychnine, for example, in setting up convulsions in a normal soil. The toxins, placental or other, so affect the central nervous system as to make it easily convulsible. The exciting cause is always uterine contraction, whether gestational, parturient, or postpartum. The paralled between these pains and eclamptic seizes is unmistakable. The nervous centers are believed to be anemic as a result of the toxicosis at the onset of the convulsions. The doctor admits without comment that eclampsia has been known to occur in ectopic pregnancy, but uterine contractions may of course be present here. The amemic state of the brain in eclampsia . favors the

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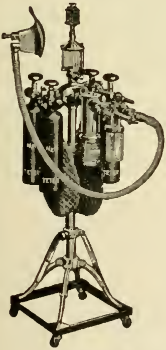

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development of cerebral edema and the author has in several desperate cases practised trephining with the aim of reducing intracranial pressure. The results were encouraging and the author hopes that he has added a new resource to the heroid measures of saving life in eclampsia.

Acetyl-Salicylic Acid in Typhoid.—Chambers (British Medical, Journal) says that the use of acetyl-salicylic acid in small doses, 3 to 5 grains every four hours, combined with tepid or hot sponging, in typhoid as an effective means of lowering the temperature. The exhibition of the drug in this dosage to typhoid patients does not alter the blood-pressure or produce any appreciable ill effects. The skin remains moist, and in some cases there is profuse sweating. The greatest effect on on the temperature is odtained by sponging the patient about half an hour after the administration of a dose of the drug, in this way combining the antipyretic actions of the medicinal and hydrotherapeutic agents. The Dr. has been especially impressed with the marked diaphoretic and antipyretic actions of the drug. Three grains every four hours had frequently considerable effect and in most cases 5 grains at the same periods produced produced profuse diaphoresis. In only case was he compelled to increase the dose above 5 grains. In two cases 5 grains every four hours appeared almost too active, as the temperature charts showed a fall in temperature of 9 and 10 degrees, respectively, during the exhibition of the drug; there was no untoward effect during the fall of the temperature. In giving acetyl-salicylic acid to typhoid patients, it is desirable, therefore, to commence with a dosage of 3 grains every four hours; if this should not be sufficient, the quantity should be gradually increased until the desired effect has been obtained. Chambers suggests as the reason why acetyl-salicylic acid is more effective as an antipyretic in typhoid than in most other fevers, that probably the fever of typhoid is frequently labile in character. This theory also affords an explanation of the undoubted value of hydrotherapy in the treatment of the disease because it is found that the more readily the temperature can be reuced by a bath or sponge the better the prognosis.

Vaccinotherapy by Irradiated Vaccines.—Renaud (La Presse Medicale) presents a biological study of typhoid vaccine. His vaccines are prepared from cultures of the bacillus of Eberth isolated from the blood of a typhoid patient whose disease was demonstrated at autopsy to be typhoid. Its virulence is such as to kill animals in twenty hours after injection of 7 to 8 milligrams. Forty-hour cultures on glucose are emulsified in physiological salt solution; the emulsion is thus exposed to the irradiation of a quartz lamp for 30 minutes. After this treatment the bacilli have entirely lost their virulence; they are incapable of reproduction and cultures remain sterile. They lose their motility, but undergo no other changes in form. This vaccine may be employed without fear or precautions. It is very easily absorbed when injected under the skin. The local reaction is slight and appears after a few hours. The author compares the effects of inoculation of this vaccine and of virus. The injection of vaccine causes but a short reaction; with an equal dose of virus the reactive period is the same. With both there is a primary period of excitation analogous to that of infections of acute beginning, and this excitation arouses the protective mechanism of the body. The author believes that the microbic products, pure and unmodified, are less toxic than has been supposed, which accounts for the larger doses possible. These irradiated vaccines cause an extremely sudden and brief reaction which never causes grave symptoms and they are eliminated rapidly and completely. Such inoculation presents no dangers, and no risks are incurred. Death is never caused by the intoxication. It causes an immunity and the appearance in the blood of antibodies; large doses may be used to obtain immunization. Each new injection increased the bactericidal properties of the blood. More than 40 typhoid patients were inoculated.

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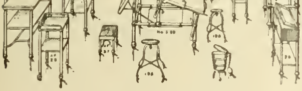

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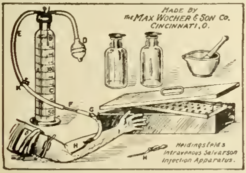

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Dr. A. Francis Foye, 1342 Q Street. Washington, D. C., writes:

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In furthering the plan of producing special issues of the **American Journal of Surgery** composed of contributions by surgeons residing within a certain geographical area, yet of international reputation there will be issued in the early part of 1912 a **Special Western Number** of this magazine.

Subjects and those to contribute:

The Operation of Gastroenterostomy, by William J. Mayo, Rochester, Minn.

The Surgery of Tendons, by John B. Murphy, Chicago, Ill.

Operative Treatment for Graves Disease, by George W. Crile, Cleveland, Ohio.

Colonic Intoxication, by J. E. Binney, Kansas City, Mo.

Practical Points in the Surgical Treatment of Exopthalmic Goitre, by A. J. Ochsner, Chicago, Ill.

Treatment of Foreign Bodies in the Esophagus, by E. Fletcher Ingals, Chicago, Ill.

Brain Surgery Technique, by J. Rilus Eastman, Indianapolis, Ind.

Treatment of Abscesses and of the Necrotic Foci Resulting from the Use of Salvarsan, by A. Ravolgi, Cincinnati, Ohio.

Treatment of Prostatic Obstruction, by E. O. Smith, Cincinnati, Ohio.

Subject not Announced, by H. Tuholske, St. Louis, Mo.

Artificial Tendons and Ligaments in the Surgical Treatment of Paralysis, by Nathaniel Allison, St. Louis, Mo.

Uterine Cancer, by John C. Murphy, St. Louis, Mo.

Arthritis Derformans, Leonard W. Ely, Denver, Colo.

Acute Angulation and Flexure of the Sigmoid as a Causative Factor in Epilepsy with special Reference to Treatment, by W. H. Axtell, Bellingham, Wash.

The character of contributions prepared by these well known surgeons are of such a nature as to make this number particularly interesting.

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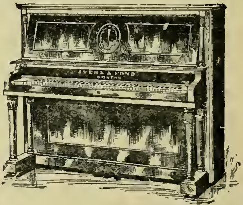

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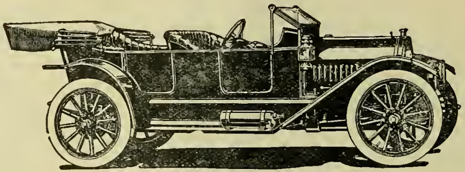

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Next Meeting Detroit, Mich., Sept, 13th-14-15, 1910.

SOUTHERN SURGICAL and GYNECOLOGICAL ASSOCIATION.
Annual Meeting at Washington, D. C., Dec, 19 21, 1911.
W. D. Haggard. M. D., Sec., Nasheville, Tenn.
Rudolph Matas, Prest. New Orleans, La.

SOUTHERN MEDICAL ASSOCIATION.
Annual meeting at Hattiesburg, M iss. Nov .14-15-16, 1911.
Oscar Dowling, M. D., Sec. Shreveport, La.
Isadore Dyer, M. D., Pres. New Orleans, La.

TRI-STATE MEDICAL ASSOCIATION OF THE CAROLINAS AND VIRGINIA.
Annual Meeting at Columbia, S. C., Feb. 23-24, 1912.
Ralfe E. Hughes, M. D., Sec., Laurens, S. C.
J. Howell Way, M. D., Pres. Waynesville, N. C.

MEDICAL ASSOCIATION OF THE STATE OF ALABAMA.
Annual meeting at Birmingham, Ala., April, 19 1912. J. N. Baker, M. D., Sec., 602 S. Perry St., Montgomery, Ala.
L. C. Morris , M. D., Pres. Birmingham, Ala.

MEDICAL ASSOCIATION OF THE SOUTHWEST.
Annual Meeting at Oklahoma City, Okla. October, 1911.
F. H. Clark, M. D., Sec., El Reno, Texas.
M. L. Perry, M. D. Prest., Parsons, Kans.

FLORIDA MEDICAL ASSOCIATION.
Annual meeting at Tallahassee, Fla., May, 10, 1911.
J. D. Fernandez, M.D., Sec., Jacksonville, Fla.
James D. Love, M. D., Pres., Jacksonville, Fla.

MEDICAL ASSOCIATION OF GEORGIA.
Annual Meeting at Augusta Ga., April, 17-18-19 1912.
W. C. Lyle, M. D., Sec. Augusta, Ga.
W. L. Felts, M. D., Pres., Corrollton, Ga.

KENTUCKY STATE MEDICAL ASSOCIATION
Annual meeting at Paducok Ky., Oct. 1911.
Arthur T. McCormack, M. D., Sec., Bowling Green, Ky.
Jas. G. Carpenter, M. D. Prest., Stanford, Ky.

LOUISIANA STATE MEDICAL SOCIETY.
Annual meeting at Shreveport, La., May, 30-31, June 1st, 1911.
Joseph D. Martin, M. D., Sec., 141 Elk Place, New Orleans, La.
E. J. Garner, M. D., Pres., 1641 First St., New Orleans, La.

MISSISSIPPI STATE MEDICAL ASSOCIATION.
Annual Meeting at Jackson, Miss, April 11, 1912.
E. F. Howard, M. D., Sec., Vicksburg, Miss.
D. J. Williams, M. D., Pres., Ellisville, Miss.

MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA.
Next Annual Meeting at Hendersonville, N. C. June, 1912.
A. A. Kent, M. D., Pres. Lenoir, N. C,
D. A. Stanton, M. D., Sec., High Point, N. C.

NEW MEXICO MEDICAL SOCIETY.
Annual Meeting at Las Vegas, N. M., (date not yet decided.) 1911.
Dr. R. C. Mcbride, D. Las Cruces N. M. Secretary.
F. B. Test, M.D., Prest, E. Las, Vegas, N. M.

SOUTH CAROLINA MEDICAL ASSOCIATION.
Annual meeting at Columbia, S. C., April 20, 1912.
Edward A. Hines, M. D., Sec., Seneca, S. C.
J. W. Jervey, M. D., Pres. Greenville, S. C.

TENNESSEE STATE MEDICAL ASSOCIATION.
Annual Meeting at Nashville, Tenn., June 11, 1911.
Geo. H. Price, M. D., Sec., 146 8th. Ave., Nashville, Tenn.
John A. Witherspoon, M. D., Pres., Nasheville, Tenn.

MEDICAL SOCIETY OF VIRGINIA
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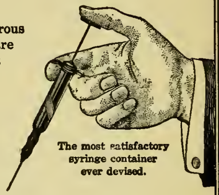

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Charlotte, N. C., April, 1912.

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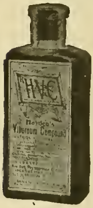

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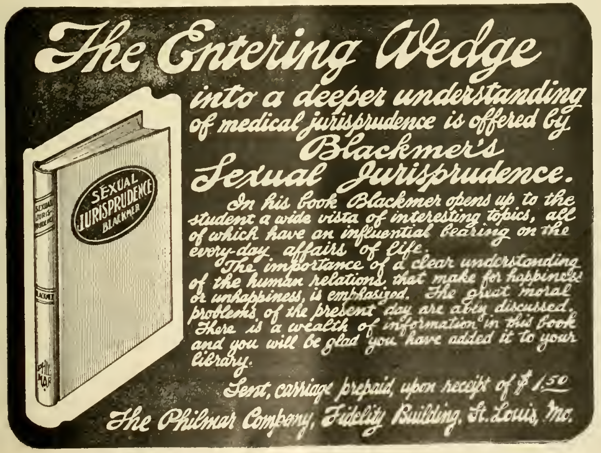

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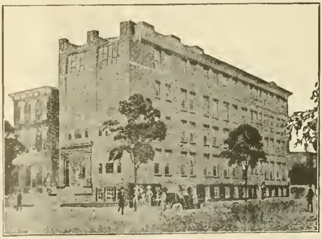

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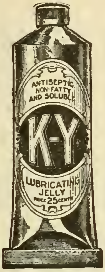

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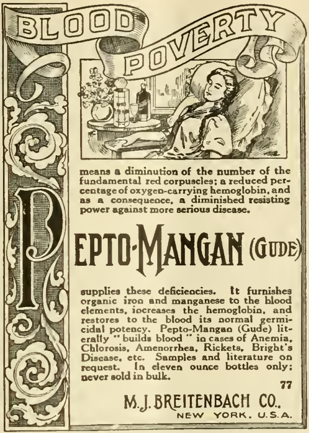

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The Charlotte Medical Journal

VOL. LXV CHARLOTTE, N. C., APRIL, 1912. No. 4

A Rational Dietary Essential to Metabolic Equilibrium.*

By Dr. H. L. Fancher, Chattanooga, Tennessee.

A rational diet does not depend on chemically analyzing food and allowing just certain proportions of proteids, fats and carbohydrates, nor on a definite number of calories per kilogram of body weight, nor on definite proportions of solids and fluids to be taken at specific periods, nor on either absolute animal or vegetable foods in definite proportions, or the total elimination of either from the diet list, nor on the special preparation of foods, and most assuredly it does not depend on ones appetite.

But it does depend on a practical adaptation of all the above considerations with at least a working knowledge of their relations to each other and a scientific understanding of the food requirements of the body.

I mean by "A Rational Diet" what the live stock specialist means by a "Balanced Ratiou." The poultryman knows the food requirements of his poultry and balances their ration with respect to specific needs. He knows the three elements of foods which are essential to animal life,—proteids, fats and carbohydrates,—and the part each plays in animal nourishment. He increases his proteids and decreases his carbohydrates for growing fowls and laying hens, and limits the amount of each to the actual needs of the fowl.

The scientific dairyman applies the same principles of diet to his herd,—meeting their food requirements for specific purposes,—whether it be for milk, butter or dressed beef. The only animals which are allowed to eat all they want of what they want at any time they want it (Fletcherize) are the ones which are being prepared for slaughter, and the only object is to increase their Ave.

It is one of the instincts of all animals, including man, to store up in time of plenty fuel for his body to utilize during the succeeding famine, which comes periodically to the lower animals, especially in their wild state, and at one time came to primitive man.

This storing of food values is most perfectly done, in the individual body, in the form of glycogen and fat.

A world-wide commerce with rapid transit has made it unnecessary to build large store houses in which to garner a seven years supply of grain, but the body still needs this ability to store up fat, etc., for emergencies, because some of the ills that man is heir to are liable to come along which temporarily forbids the taking of food.

A moderate amount of adipose tissue is essential to one's well-being. But as the seven years of plenty is extended to three-score-and-ten the individual is going to over-tax his store house capacity and serious disturbances of metabolism are likely to occur.

Food values are now scientifically estimated in chemical heat units called calories. A calory is the amount of heat necessary to raise the temperature of one kilogram of water one degree centigrade.

Chemistry has also given us a scientific division of food elements as regards their importance in metabolism. I refer to proteids, fats and carbohydrates.

The average normal adult at rest needs approximately fifty grams of proteids, fifty grams of fats and three hundred grams of carbohydrates per twenty-four hours. There are four calories in a gram of proteids, nine calories in a gram of fats and four calories in a gram of carbohydrates. The above estimated in calories for twenty-four hours would be: Proteids, 200 calories; fats, 450 calories; and carbohydrates, 1200 calories. Giving a total of 1850 calories for 24 hours for an average individual at rest. A large man, doing hard manual labor, would need twice this amount. But the increase in protieds and fats should be greater in proportion than the increase in carbohydrates. For this reason the laboring man needs more bacon and beans and less desserts, and the man of leisure or the man who has but little exercise must decrease the amount of protieds and fats out of proportion to the decrease in carbohydrates.

As oxydation in the body cannot take place without oxygen, and as our principal oxygen supply comes through the air we breathe and the water we drink, it is apparent that an abundant supply of both should be available.

When we speak of oxydation (and that is the basis of all our knowledge of food values) it is best to make a crude comparison of our body with the furnace that heats our house. The food is to our body what the coal is to the furnace. The products of complete combustion in the furnace are the heat produced and the ashes which are easily sifted out through the grate-bars.

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*Read before the Chattanooga Academy of Medicine December 15th, 1911.

The clinkers which clog the grate-bars and the soot which stops the flues are products of incomplete oxydation, and they cause trouble.

In the body products of incomplete combustion are constantly giving trouble, usually because more food is being taken than can be utilized.

It is claimed by a great many investigators that uric acid and all the toxic agents which produce gout, rheumatoid conditions, arteriosclerosis, neuritis and many other systemic disturbances are caused by the products of incomplete oxydation.

Indicanuria is simply a manifestation of incomplete digestion, and is perhaps nonirritating within itself. However, it is positive proof that the individual is not digesting and assimilating all the proteids he is ingesting.

This may be due to insufficient gastric secretion, or too great alkalinity of the intestinal contents, but in most instances the amount of food taken is too great.

Bitter stomactics will sometimes aid the digestion temporarily by stimulating the glands to greater activity; the administration of acids will often prevent putrefaction because putrefactive bacteria of the bowels do not thrive except in an alkaline medium. When the acids are withdrawn the patient's condition is no better. But by reducing the diet even below the minimum caloric requirement for a time and then by a very gradual increase up to a normal amount excessive bowel putrefaction may be prevented and serious metabolic disturbances averted.

Excessive ingestion of proteids will cause more serious disturbance in metabolism than either fats or sugar. However, it is the most essential food element and when reduced too low will cause equally serious conditions. It is the principle tissue builder, and when it is practically eliminated from the diet for any considerable period of time, as is the case sometimes with condensed milk-fed babies, the bones, nerves, muscles and blood will later show marked underdevelopment.

Physicians are succeeding now in convincing their patients that rational and scientific feeding of babies and children not only prevents sickness and saves lives, but adds strength, stamina and endurance to them in later life.

If we could convince the adults who are beginning to have metabolic and organic disturbances that their health depended just as largely on a rational and scientific dietary as does the health of the little ones, we would have accomplished much along the line of preventive medicine.

Gluttony and gormandizing have been dissipations since history began and will be as long as a pleasure-loving people think only of today and care nothing for tomorrow. Over-eating was the first recorded sin against man, and as we inherited some of that old Adamic nature the same sin is frequently committed today. Figuratively speaking the same punishment is inflicted, for none of the joys and pleasure of Eden can be enjoyed by the dyspeptic.

When our gormandizing and intemperate patient is in pain he listens attentively to our advice but when his pain is relieved it is soon forgotten and he returns again to the "flesh-pots of Egypt."

The importance of a rational diet in maintaining metabolic equilibrium is more apparent when we consider that it is almost our sole reliance in the treatment of diabetes and nephritis, and one of the most important considerations in the treatment of tuberculosis, gout, rheumatism, arteriosclerosis, hepatitis, typhoid fever and all other gastro-enteric disorders.

A great deal could be accomplished if physicians had a better knowledge of scientific and practical dietetics. Comparatively few of us have taken time to study the chemistry of even a few of the more common articles of diet. We know comparatively little of the body requirements of proteids, fats and carbohydrates under different conditions, much less of their end-products, and are woefully ignorant of the quantitative estimation of foods in calories.

We cannot dismiss our responsibility by leaving the diet to the nurse, for she is more ignorant than we, and knows but little more about scientific dietetics than the ordinary house-wife.

The subject of dietetics in our medical colleges is almost universally left out of the curriculum, and the course given on dietetics in the training schools for nurses is but little better than some of the advertising demonstrations given in the down-town show windows.

Until physicians qualify themselves to plan and order a scientific rational diet adapted to the specific needs of their patients, and until nurses are qualified to understand and execute such orders, faddists and extremists will do most of the dieting for our well-to-do patients.

When dietetics receives the attention its importance demands, physicians will be able to write diet prescriptions calling for so many calories and definite proportions of proteids, fats and carbohydrates of certain kinds of food, and the nurses will be able to fill the prescriptions just as scientifically as the pharmacist fills the prescriptions for medicines.

I do not like to make comparisons between two essentials, but I believe that a knowledge of dietetics is just as important to the physician's qualifications as a knowledge of materia medica.

Hotel chefs, boarding house proprietors and restaurant keepers have taxed their ingenuities to the utmost in getting up bills-of-fare which will tempt the appetite and please the palate, with no regard for the stomach's ability to digest.

A long list of foods with some variety in the preparation is not objectionable

A highly embelished menu card bearing a mythical coat-of-arms or an elaborately wrought monogram is attractive to ones artistic taste. But some of the long French names, hyphonated and apostrophied, of impossible pronunciation and of unknown composition is a direct insult to one who wishes to live the simple life and remain well.

Who would attempt to estimate the caloric value, or chemically analyze, to say nothing of the improbable digestibility of complex mixtures like English plum pudding, mince pie, fruit cake, hashes and all the little appetizing delicacies in the way of desserts, entres, salads and 57 varieties of condiments.

Simplicity should be the key-note in prescribing a diet. Learn well a few of the common articles of diet,—a few cereals, vegetables, fruits, meats, milk products and bread,—know their albumen, fat and sugar values,—estimate the quantity in calories and with a knowledge of the individual requirements of your patient, and a rational dietary for the adult should be no more difficult than the scientific modification of cows milk for the baby.

Reference has been made to the following:

Bulletin 28 U. S. Dept. of Agriculture. (The chemical composition of American food materials).

Medical Diet Charts. By Dr. H. D. Arnold, Boston. W. B. Saunders Co.

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Surgical Sepsis.*

By Lucien Lofton, A.B., Ph.D., M.D., Emporia, Virginia.

In consequence of the well understood meaning of the term "Surgical Sepsis" by every enlightened medical man of the present day, I forego the useless expenditure of your valuable time, by attempting to herewith cite its etiology or pathology, believing a discussion of some of the more practical elements entering into, and having to do with our surgical work, of far more importance.

Without surgical sepsis the average candidate for the knife would have plain sailing, and restoration of the patient, barring shock, would be the natural conclusion. But that element of doubt, always existing in the operative field, will, until a more complete understanding of surgical sterilization is attained, remain a factor of more importance, than the mere performance incident to the scalpel invasion. I grant you everything claimed by the conscientious operator. I freely partake of his energy, and vouch for his integrity; but despite precautionary measures of the most sacred kind, so far, sepsis is the one giant enemy against whose invasion no effort of science has successfully and completely combatted.

Clean, well nurtured, and robust persons, remorselessly prepared for operative attack, fall before the invading foe with the same equanimity of indifference as does the most uninviting and foul specimen, hacked by disease, struggling amid the horror of a hovel impaled, and hugging the vicious sunless atmosphere of the truly ignorant, or the poverty stricken.

Man with his boasted learning, is yet a simple mental creation of his time, even amid the terrifying injunction that disease demands and takes its toll without warning, and is no respector of person.

Upon the whole, it is my opinion that major operations, of whatever character, are far less complicated by sepsis than the so-called minor exhibitions of the surgeon's manipulations. We naturally regard an abdominal investigation, for various reasons, a task of importance. We must conclude a gasserian ganglion removal a stupendous task. We should concede a Wyeth's bloodless hip no undertaking for the novice. We agree, indeed, that a rib resection causes anxiety of a peculiar kind. We will not deny the importance of a laminectomy, nor can we afford to treat trivially the enucleation of an inferior maxilla. Yet when we conservatively recount the surgical success following this class of endeavor, there remains some reason why our lesser contests should so often and persistently confront us with miserable failure.

In the last extremity, must you bring to us the charge that we are not as surgically industrious or ambitious for success in small affairs, as we are supposed to display in the larger domain of our field of action. Surely such an unjust accusation should not mar the tranquility of an honest man's mind.

To me, there is as much genuine pleasure in noting a wound heal by primary intention upon the hand, as to observe the always desired flap of a celiotomy close as if hermetically cemented by nature.

I believe a large percentage of surgical sepsis to be the result of unnecessary bruising, macerating, and tearing of healthy tissue macroscopically not observed of course which is not dislodged under irrigation, but which has been successfully compressed in the wound by repeated sponging, subsequently to be hidden by flaps and left there to disintegrate, if not absorbed, the latter proceedure, in my judgment, being a remote probability, owing to the outward tendency of all drainage which may follow in a given condition. A wound left to heal by granulation, under ordinary surgical precaution rarely develops septic matter, the once heralded laudable pus of our forebears.

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*Read before the Southside Virginia Medical Association at Suffolk, Va., March 12th, 1912.

While thorough irrigation of a mild character of all infected wounds, when practicable, may not meet with your approval, it is my experience that where we have a condition to deal with, either primarily or secondarily, that unless proper irrigation is practiced, dependent drainage is the proper thing to institute, provided you desire to eliminate further contamination. Of course flushing an abdominal cavity when pus exists, should not be tolerated in the face of our present enlightenment upon the subject; but every effort should be in the direction to localize and drain by all well known methods at our command.

It has occurred to me that with free, but gentle, ablutions of boiled sterile water and green soap, in cases of ordinary injury, removing therefrom all macroscopic filth, likewise hair and so forth, followed by thorough normal saline irrigation just prior to the last surgical step, is practically all one needs to secure a timely union and a good aseptic result. A moist dressing is, to my mind, always indicated, for then you may be reasonably sure no infection will come in from without. Such antiseptics as bichlorid, phenylic acid, todin, alcohol, and many other corrosive germicides, in a measure, really court destruction of the delicate cells, and which if left undisturbed would have proved of greater benefit during the recuperative process. I would not have you believe I fail to fully realize the great and growing importance of antiseptic preparedness, but experience has taught me it is not indicated nor applicable to all cases, especially in persons injured, who are otherwise up to the average in health and resisting power, or to be more in line with present day advancement, whose opsonic index appears objectively normal.

The whole tendency of nature where the integument is broken, is towards recovery, despite its many severe tribulations and harsh insults at the hands of the surgeon. We cannot do less than give her an opportunity to assert her inviolate rights. If we are invariably assured that our hands, or our gloves, and our appliances are surgically clean, nature in her reparative process will not be found guilty of any indiscretion or tardiness in assisting your patient to an early recovery, nor will she attempt to snatch from your brow any coveted professional laurels.

Surgical sepsis discloses no place of abode. It is to be found and fought in the most modern operating amphitheatres of America. You will find it stalking in the halls of the palace; in the cabin upon shore, and in the sick bay of the titanic monsters that plough the high seas. It is piratical, claiming its victim from among the bosom and flower of virtue, no less than among the despairing plebeian clay. Putrefaction creates the demand, while ignorance, superstition and indifference stand sponsor over the couch of sorrow and affliction.

It is our moral obligation, forsooth our inflexible duty, when confronted with this immeasurable enemy of man, to spare no pains, take nothing for granted, but lead on defending and contesting to the last ditch. Weapons are always within easy reach, and the surgeon assumes no false premise, when he declares open combat, and hastens to remind the victim of the existing condition.

The compound—latent sepsis,—sends a thrill through the speaker, witnessing and experiencing as I have recently the horror and destruction of its ravages. We, who are far removed from hospital facilities, I trust, keenly feel the responsibilities incident to septic infection. The layman, gentlemen, like the physician, will, and does take grave chances. It is our obligation, even if we are guilty of not following our own advice, to earnestly plead with our neighbor to not neglect an infected wound. We should impress upon him that tetanus, meningitis, and septic infection or blood poison are conditions whose mortality is more general than typhoid, larger by far, than smallpox or pneumonia and greater than all three combined. That sepsis in the majority of cases is preventable. That should he fall a victim to its onslaught, that a maimed body or a helpless limb may result. That it kills quickly if neglected, and that clay poultices with or without vinegar, scorched linen, terpentine nay the petroleum products, are not specifics, neither are they justifiable when used by a man of intelligence when influenced by the ignorant, or by the ignorantly—wise utilized.

Surgery would, in a broader sense, be divorced from its dread upon the part of the unfortunate, if sepsis could be guaranteed against. We can assure, but not definitely promise. When we behold, and study the antiseptic operating picture, we feel justified in proceeding, fearing no fatal result. But are we safe? Time only gives the situation the count of ten. Then again, when we are reminded of the sera—a discovery contemporaneous with antisepsis—alcoholics, iron, chlorate of potash, and other reliable adjuvants, we take renewed courage. But all of these have failed.

The dawn of a sepsisless surgical era is anxiously awaited. The shades of Lister and Pasteur hover in the offing. The echoing call of suffering human kind vibrates with the intensity of a longing, undefended, tortured soul.

The surgeon, when defeat soars zenith high, stands transfixed, cowered and defenseless, while life ceases, and strong men speak in hushed tones.

Report of Six Cases of Gonorrheal Infection Treated with Neisser's Mixed Bacterins.

By F. D. Austin, M. D., Charlotte, N. C.

Case No. 1.—June, 1911.

Mrs. B., age 23, married; one child living, one dead.

Case was referred to me by Dr. Mills. She had been infected with gonorrhea for about five weeks, having acquired it from her husband.

On my last visit I found her with a temperature of 102.5 and a very painful, red and largely swollen right knee with a little swelling and tenderness in the left. I gave her the usual anti-rheumatic treatment together with a 20% Ichthyol Oint. and a Sat. Sol. of Mag. Sulphate applied alternately. The pain was so great that it required Morphine Sul. ¼ gr. dose every 3 or 4 hours to relieve the pain.

On the 4th day the right wrist became involved, on the 5th day the right shoulder, and in the meantime the knees were getting progressively worse, temperature going to 104 and the patient chilly, pulse 110 to 130. However, I fought the local condition with douches, urinary antiseptics, etc., together with the local applications to the affected joints for about two weeks, but to no avail.

Finally, I resorted to Neisser's Mixed Bacterin (Mulford's). I gave her the first dose; the patient claimed to feel a little better 24 hours later. I gave her a dose every 5 days till she had the 4 doses, the patient feeling better all the while, and 10 days after the last dose she got out of bed, and steadily improved, and with massage and passive motion of the joints got entirely well.

Case No. 2.—July, 1911.

Mr. C—; single, age 24. Had gonorrhea for 4 years. Was pronounced cured a few times only to return in a few weeks. His symptoms was chiefly the "morning drop" with a few shreds in the second glass of the two glass urine test. Prostate was slightly enlarged and tender to the touch; urethra apparently normal.

Patient was treated by prostatic massage instillations of Silver Nitrate and irrigated with 1-4000 Pot. Permg. and dilated every 5 to 7 days together with Salol and Urotropin internally. He was treated this way for about 5 weeks but still had the morning drop.

I decided to try the Neisser's Mixed Bacterin on him, and by the time he had had his last dose his discharge had stopped and has not returned since.

Case No. 3.—December, 1911.

Mr. H—; single; age 21. Had gonorrhea July, 1911, and I treated him in the usual way. Got apparently well about Sept. 10, 1911, but relapsed on him about Nov. 1st, 1911, showing a discharge only in the early morning and slight burning on urination, second glass cloudy of the 2 glass urine test. Prostate slightly enlarged and a little tender to touch, urethra very sensitive. Was treated by silver nitrate instillations, dilated and irrigated with Pot. Permg. Discharge stopped in about three weeks.

On Nov. 15th patient was awakened about 5 a. m. with excruciating pain in left knee followed by redness and swelling, and also pain in right ankle. He was treated with 20% Ichthyot Oint., Sat. Sol. of Mag. Sulphate, Cholchi-Sal., etc., for a few days but did not improve. I mentioned the Bacterin to him and he decided to take it. He improved right along after the third dose and is now entirely well.

Case No. 4.—November, 1911.

Mr. W—, age 25; single. Had gonorrhea four years ago. Has been apparently well for 18 months except neuralgic pain in prostatic region.

His prostate was very large, smooth, hard and painful to touch; quite a good amount of debri was massaged from his prostate, but no gonococci was found under the microscope. Pus cells were plentiful.

On December 1st he noticed his left wrist was very painful, red and swollen, and on December 2nd it was so painful he could not use it at all, and had to take Codine and Aspirin for pain.

I gave him his first dose December 2nd and every five days afterwards till he had taken four, then he took three size D, or the largest size doses afterwards. He is entirely well now; can use his wrist as good as ever.

Case No. 5.—Mrs. W—, age 28; married. Four children living, none dead. My father, Dr. J. A. Austin, was called to see her on the 5th of January. She was complaining of terrible pain in the ovarian region, could not stand on her feet except in the stooping position on account of the pain and tenderness in the lower abdomen. She had a yellowish, slightly bloody discharge from vagina.

I was called by my father to make a microscopical examination of the vaginal discharge, and found staphylococcus, streptococcus, gonococcus and pus cells.

We put her on 1-4000 Pot. Permg. irrigations, Salol and Urotropin internally, and Neisser's Mixed Bacterin. Patient began to improve immediately after the first dose and is now feeling fine, all the abdominal pain is gone and discharge has entirely stopped and seems to be perfectly well.

CASE NO. 6.—February, 1912.

Mr. S—, age 29; single. Had gonorrhea three years ago, and had never been free from his friend, the "morning drop." Patient applied to me for treatment November 18, 1911, and I found his prostate large, hard and tender, and upon massage expressed a lot of pus cells and prostatic secretions. Urethra very tender, reddened and congested; 2nd glass of the 2 glass urine test cloudy. Patient was treated by prostatic massage, dilatations, instillations and irrigations, but the drop was there every morning.

On February 10th, 1912, I gave him his first dose of Neisser's Mixed Bacterin and the following week after the 13th he had no more discharge. This was the first week he had been free from the "morning drop" since infection. He has taken the four doses and there is still no return of discharge and from all indications seems to be well.

Conclusion.

I have never used it in acute gonorrheal urethritis, but acting as Dr. Jas. G. Callison of New York Post Graduate does in typhoid fever, I believe that if we will begin our Bacterin just as soon as our patients present themselves for treatment, and give them a dose every five days for four to eight doses, that we could prevent many of the complications and sequelæ that follow an ordinary case of gonorrheal urethritis.

Nausea of Pregnancy.*

By J. N. Upshur, M.D., Richmond, Va.

A malady so common and known to exist from the days, it must be supposed, when child-bearing began, would seem not to demand even a passing consideration. It might even be claimed that it belonged to the physiologic domain, but alas, every man, of even a few years experience, knows that it can become pathologic, and so grave in its manifestations as to jeopardize life, and not infrequently carry the young mother to the tomb. It is, therefore, my effort to deal with this affection in the most practical manner, and to suggest if I can the management of the condition as free as possible from every taint of empiricism. It is a statement, I dare say, which will not be contradicted, that the treatment is not only empirical and mere guess work, but in the minds of many practitioners, often is not considered of importance enough to demand any treatment at all, except patience, until the gravid womb rises out of the pelvis. It goes without saying that there is of necessity impairment of the mother's nutrition by whatever interferes with the taking of proper and sufficient nutriment. A careful study and analogy of the affection shows most conspicuously how widely different degrees of nausea may occur, how transient the attack may be in some cases, and how persistent and grave in others. It is also true that some of these cases are psychic. For example, a case was reported in which the nausea was brought on by hearing the rattle of the dinner dishes; another case, of intractable nausea was aggravated when the woman heard her husband's latch key put in the lock. In one case in which there was ordinarily no nausea, the patient had purchased a new dress; when it was opened to cut out the sight of it made her very sick, and it continued to have this effect upon her even after delivery.

Psychic cases such as these simply interest us, as they are never serious enough to do much harm. I have seen nausea simulating the nausea of pregnancy when pregnancy did not exist, and even in the unmarried. Indeed, there is no reason why it may not occur, when the uterus is distended by other bodies besides the fœtus. I have seen violent nausea follow packing of the uterus after divusion and curettement, relieved instantly by removal of the packing. Again I have seen a woman retch and vomit under the impulse of forcible stretching of the uterine cervix. I mention these clinical facts as being suggestive that something may be done for the comfort of the woman in the early days of pregnancy, because in many cases it may and probably is due to some pathologic cause of lesion or position back of and incident to the condition of pregnancy. Some women never experience the least sense of discomfort, others are simply uncomfortable until after breakfast. In some the sensation is only experienced in the night, keeping them awake for a time, while in some cases the nausea is persistent, violent and intractable, proving a menace to life itself. Therefore, in every case it is the duty of the doctor to search for the cause and remedy the trouble if possible. Misplacement is the consequence of increased weight from the evolution of the uterus incident to pregnancy and only remedied naturally after the fourth month, when the size of the uterus forces it to rise out of the pelvis, or tilted backwards, it may be lodged under the sacral promontory, there may be abrasion or ulceration of the cervix. Women whose habit it is for the bowels to move normally every day, become obstinately constipated so soon as conception takes place, undue pressure in the pelvis from fecal accumulation in the rectum, upon the ovaries, tubes or uterus, may be causative. A torpid liver with consequent retention of effete matters in the system. The existence in the uterine lining of a metritis, too mild to prevent conception or cause abortion, possibly the pathologic condition which is back of retained adherent placenta found at the conclusion of pregnancy.

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*Presented to the fourteenth annual meeting of the Tri-State Medical Association at Columbia, S. C., February 21st and 22nd, 1912.

I quote from an elaborate article in the Journal of the American Medical Association, January 6th, 1912, by C. B. Ingram, of Denver, discussing the history of the malady. "Williams, in 1906, suggested three forms of pernicious vomiting, reflex, neurotic, and toxic. The reflex form was first brought into prominence by Graily Hewett, numerous reports of cases are fonnd where correction of a malposition, or the removal of an ovarian cyst, have given perfect relief. Kallenbach, in 1890, called attention to the neurotic type, relief coming to the patient from suggestion. Lindermann, in 1892, suggested the auto-toxic type. Matthew Duncan called attention to the liver in hyperaemias in which the lesion was that of acute yellow atrophy. In 1885, Roughton substantiated Duncan's conclusions. But in 1901, DeRibes and Saint Blaise reported definite liver lesions. They concluded that hyperemia was the forerunner of eclampsia." I have long believed that the cause of eclampsia did not lie solely in the kidneys, but that impaired hepatic function played an important part. "Frank, in 1893, made the first study of metabolism in vomiting. He found that the amount of nitrogen in the urine was greater than that taken in the food, and so concluded that death was due to starvation. In 1894, Davis noted the low urea output. This was used by Saint Blaise in his argument that vomiting was a prelude to eclampsia. Later, however, Pierrehughes and Milliere noted that though the elimination of urea was small, enough sodium hypobromite solution was decomposed to indicate the presence of a normal amount of urea. This confirms Williams' observation of an ammonia co-efficient high enough to be of prognostic importance. Stone, in 1903, made the first definite observation indicating the toxic nature of the vomiting of pregnancy, accompanied by liver necrosis, resembling acute yellow atrophy. Stone's observations were confirmed by Ewing in 1904. Edgar the same year advanced similar views. In 1906, Williams reported a number of cases, giving his reasons for believing that pernicious vomiting and eclampsia are not manifestations of an identical toxaemia, and stated that the latter by the study of the ammonia-nitrogen could be diagnosed and treated. Hoffman has asserted that the liver of all pregnant women show some fatty degeneration of the central portion of the lobule. Ewing and Waif say that the urine of all pregnant women shows signs of perverted nitrogen metabolism. Wricharot and Hoffman are responsible for the belief that there is a toxin of placental origin." Some of the more recent suggestions point to the disturbed function of various glands. Study of the influence of the secretion of the thyroid and parathyroid glands suggesting thyroid extract as a remedy in the hyperaemias of pregnancy. I have had no experience with this remedy, but give you the hint for what it may be worth. Histological variations in the thyroid, parathyroid and suprarenals have been noted by various observers in pregnancy. No definite conclusions have been reached because the observations have been too recent. A better understanding of the physiology of these glands may be valuable in the future. From observations through many years, I am not inclined to the opinions or conclusions of the men I have quoted from Dr. Ingram's paper. These various observations are of interest, but it is a fact that it is an exceptional case that entire relief does not come after the uterus has risen out of the pelvis, and adaptation to the new condition been established. To my mind, if the nausea and vomiting is due to lesion of the liver or kidneys it would not disappear at this stage of pregnancy and the health of the woman be all that could be desired during the latter months of pregnancy and after delivery, unless it be impaired by some accident of parturition, or trouble developing during convalescence. The serious problem is that of inanition during the early months, when the woman suffers from the inability to take or retain food. both mother and foetus suffering. The solution lies in such treatment as will relieve or at least control the nausea and vomiting, so that the woman's comfort may be assured and she may take and retain the amount of nutrition essential to her well-being. Of course if the cause is phsyic, suggestion and diversion of mind are invaluable, backed up by simple nervines like sodium bromide. I am of opinion that the necessity of bringing on abortion or premature labor is rare; in a long professional life I have yet to do it the first time. The most careful examination should be made in every case to ascertain if possible the cause, the nutrition of the woman being considered of the first importance, and the taking of such articles of diet as are most easily assimilable and most agreeable to the stomach, should be urged. The bowels should be kept in a soluable condition, and the occasional administration of a mercurial is important. If necessary, rectal feeding is to be resorted to. Of drugs to be administered by the mouth, I have found one to two drop doses of Tinct. Iodine in a teaspoonful of water, repeated if necessary in a half hour, when the paroxysm comes on, most beneficial. Fowler's Sol. gtt. 1 three times a day in a teaspoonful of water and a belladonna plaster to the epigastrium is useful. Drop doses of wine of Ipecac have proven beneficial. I do not think cerium oxalate of any value. Replacement of the uterus and adjustment of a pessary, painting vaginal fundus freely with iodine, including neck of the uterus and the cervical canal, I can commend most highly. Some clinicians have recommended and resorted to stretching of the cervical canal, and claim that it has been beneficial. I have had no experience with this proceedure, but it does not meet with my approval; there is too much risk of bringing on abortion, which is not justifiable.

The foregoing remarks are intended only to be suggestive. I might mention as illustrative a number of cases, but space and time do not admit of my doing so.

210 West Grace St.

Pellagra.*

By I. A. McSwain, M.D., Ex-President Tennessee State Medical Association.

Pell– skin, agra, rough. Accented on first syllable Pell'agra. The disease was discovered in northern Italy about the middle of the eighteenth century, later in Spain, France, Corfu, and other European countries. In the United States, it has been observed only within the past four or five years. In 1910 diagnosis was made of seventeen cases of the disease in the Baptist Orphanage at Nashville, Tenn. Since that time it has been found in many counties of the State, and in several of the Southern States. In November, 1911, here were estimated to be over one thousand cases in Tenn. In an address delivered before the Tri-State Medical Society of Tennessee, Mississippi and Arkansas by the President, Dr. J. W. Barksdale, he stated that there were probably three thousand cases of the disease in the State of Mississippi.

Making due allowances that the disease may have existed even in considerable numbers in this country before it was recognized, yet we are warranted in the statement that the disease is spreading with great rapidity, and the indications are that we may be face to face with one of the most alarming epidemics that has ever visited this continent. More loathsome than smallpox, more widespread than typhoid or yellow fever, and as a scourge to both body and mind more dreadful than tuberculosis or cholera. It is of great importance that each practitioner of medicine becomes diligent in his research, and watchful to observe the symptoms of this disease which is insidiously working its way into the life of our people. Its approach is unheralded by the glamour that usually attends the advent of an endemic or epidemic disease, it being slow in its development, and of a nature somewhat obscure in manifestations, and for this reason is apt to be overlooked, or mistaken for other diseases.

It is well worth while to note the peculiar conditions and environments of the people of northern Italv, where such ravages have been committed by the disease for the past one hundred and sixty years. From a geographical standpoint one would suppose that there does not exist a more salubrious climate than that country. Situated at the foot of the Alpine mountains—which bound it on the north, drained by the historic Paden and the Poe, refreshed by the sea breezes of the Adriatic on the east and the gulf of Genoa on the west, while overhead stretches the cerulean sky that has been the theme of poets for ages. With such natural beauty and surroundings one would ordinarily expect to find a healthful, prosperous and happy people. And yet right in the garden spot of Italy, in the colony of Lombardy, this loathsome plague made its first appearance. But what of the people, their habits and customs? They were the poorest of the poor. A haughty land-lordism, and an abject peasantry tell the story in one sentence. Those people were compelled to cultivate the fertile valleys and rich table lands, but not allowed to eat of the products of their labor. They were driven to the most severe tasks, ill clad and underfed, lived in the dirtiest of hovels, and were ignorant, hopeless, despondent and forsaken.

And now we come to consider one of the factors which was and is regarded by Italian physicians as the chief cause of the malady. This same opinion is held also by physicians in France, Corfu, Spain, and other countries, where the disease has been known. It is that of the use of maize or corn as the principal article of food.

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*Read before a meeting of Paris Academy of Medicine, Paris, Tenn., March 1st, 1912.

Some writers on the subject deny this theory but those who have been closest to the disease in European countries, hold to the belief that the corn as used by the people in the countries where the disease has been most constant, is without doubt a cause, if not the chief cause, of the malady.

Indeed, it has been observed that the spread of the disease, as well as its intensity, is in direct ratio to the quality of the corn on which they subsisted. The maize grown by the inhabitants of northern Italy was of a poor variety, badly cultivated, prematurely gathered, housed in damp bins or houses, and then without selection was ground into meal, hastily and imperfectly baked in large loaves, or made into a porridge called palenta, in quantities sufficient for a weeks supply without yeast or seasoning, and the bread became moldy and was totally unfit for food. The palenta was warmed over again and again. Yet those down-trodden people were compelled to eat it or starve. It constituted the principal article of food. as there was very little variety in the bill of fare obtainable, and the disease was confined almost exclusively to this laboring class of poor peasants, for more than 100 years.

The people in other parts of Italy ate a great deal of corn, but it being farther South the grain matured better, was cooked with more care, and mixed with other substantial food, and they escaped the disease. It is to be admitted, however, that cases have been reported where corn was not used to any great extent as a food, but there is a well grounded suspicion that pellagra is a communicable disease, and if so, this may account for the existence of such cases.

After a most careful review of the literature and of the observation of those who are most conversant with the subject, we are constrained to believe that no history of pellagra can be written, apart from the admission that damaged corn products enters largely into the etiology of the disease. Contributory to this must be considered a want of a variety of food such as meat, vegetables, fruit, &c., bad sanitation, filth, exposure, overwork, and extreme poverty.

It need not be inferred from what is said above in regard to corn or maize that the statement includes the use of corn that has been well cultivated and matured, gathered at the proper time and housed dry and kept dry and then before it is ground into meal, or otherwise prepared for food, all rotten or damaged or worm eaten ears thrown aside, and nothing used except sound, thoroughly matured, and carefully preserved grain. The essayist well remembers when a boy on the farm, that the corn to be used as food was shelled off the cob by hand, and all damaged corn was rejected, as being unfit for use. I remember also that corn that had been planted late and that which had suffered from either too much or too little rain or that had not been well cultivated or that had been stored before it had matured, the grain was soft and spongy, and very often at the small end of the ear would be found fungi, or the appearance of having been infested with worms, and horses fed on this corn very often exhibited symptoms of intoxication, such as vertigo, nervousness and general disorder, from which they frequently died. The disease was known as "blind staggers" and was considered as a serious and fatal malady. While on this part of the subject, the essayist begs to emphasize the necessity of good grain in the manufacture of corn foods. Now what are the methods of today in the commercial world of handling corn for food?

The old water mill has passed into history and exists only as a curio; we no longer shell corn by hand, neither is there any discrimination made between good and bad corn. It is loaded into the cars, and shipped to the great milling centres, thrown into the hoppers of shelling machines and ground into meal; no inspection has been made, no selection had, it all goes into and through the machinery and into sacks and is ready for the trade. Result: the consumer may be poisoned by the very thing which he supposes to be the staff of life, which becomes unto him the savor of death unto death.

We noted just the other day that Dr. Wyley, national food inspector, had condemned and confiscated a lot of damaged corn on the market, and as usual where interference is made in commercial circles by health officers in their efforts to protect the public health a hue and cry went up from dealers protesting against their "sacred rights" to inflict disease on a long suffering people.

All sorts of protests are being made in our own State against the efforts of State Food Inspector, Dr. Brown, to protect an innocent public from impure food and drugs, and it is high time that the medical profession everywhere were waking up to the importance in this matter of good and wholesome food in our conquest for the promotion of public health.

While theories pro and con are being advanced in regard to whether or not the use of corn may cause pellagra, steps ought by all means to be taken to prevent damaged corn or its preparations being used as food.

The use of alcoholic liquors has been noted as contributory in the causation of pellagra. This may be true for two reasons. Diseased corn may be used in the distillation of liquor, and it is an established fact that liquor drinking produces disease of cell structure, interferes with normal metabolism, prevents elimination of effete products, and renders the system more susceptible to disease tn general.

The question recurs again and again, Is pellagra contagious? This, too, as well as most all the questions regarding this strange and subtle malady, is not definitely settled. Most authorities assume that it is not communicable direct from one person to another, but there is much in the history of the disease that leads to a well grounded suspicion that it is communicable, by contagion. The rapid spread of the malady, the growing belief that many ailments not hitherto supposed to be communicable from one to another are now known to be contagious, the fact that many skin diseases, and gastro-enteric, and cerebro-spinal affections are thought to be contagious, all point to the possibility, and we may say probability, that this also belongs properly to the class of contagious diseases.

It may safely be stated as an aphorism in medicine, that there is more in the philosophy of contagion of disease than is found within the limitations of the present knowledge of the science, and because we may not see or apprehend the source of communicability is not always positive evidence that it does not exist.

For the present, at least, the State Board of Health is perfectly justified in declaring the disease to be possibly contagious, and it should be made obligatory to have reports made of all cases to the health officers of every county, and all safeguards be thrown around it to prevent its spread.

Heredity.—It is an open question as to whether or not pellagra belongs to the class of diseases known as hereditary. Reasoning from analogy there are many things about the disease that would lead to the presumption that it has those elements in it to entitle it to be so classed. Heredity without doubt plays an important part in many ailments, not strictly regarded as being transmissible from parent to children. For illustration, some families seem to be peculiarly liable to rheumatism, fevers of different kinds, liver disorders, and dyspeptic troubles, Bright's disease, skin diseases, nervous disorders, &c. Even certain habits and passions, good and bad, seem to have been handed down from father to child. Now a disease such as the one under consideration, that affects to such a marked degree the cutaneous, nervous, and alimentary functions, and evidently extends its ravages to the whole constitution, would most probably transmit to the posterity if not the disease itself at least a strong tendency thereto, and this is as much as can be said of some other diseases, which are without dispute recognized as hereditary. Taken altogether the essayist would venture the belief that the children of parents who have the disease, especially in its chronic form, and if born during the course of the ailment, are very liable to become pellagrins if exposed to the peculiar conditions that precipitated the disease in the parent. And indeed, if not so exposed, would be more subject to infection from contact, or from whatever methods the disease may be communicated.

But we must go on to consider the symptoms, diagnosis, and briefly something of the nature or pathology of pellagra. No attempt will be made in this essay to a classic discussion of all this, but will try to make plain how we are to recognize the disease.

It is a disease of a three-fold character, affecting the skin, gastro-intestinal canal, and nervous system. We would not be safe in relying upon the symptoms observed in either one of these affections, but must take them as a whole. We might mistake the skin trouble for erythema or eczema or sunburn. The stomach and bowel disorder for acute indigestion, common diarrhea, or entero-colitis. or tubercular infection of the mesentery. The cerebro-spinal symptoms for meningitis, hysteria, neurasthenia, hypochondria, &c. Or to those practitioners who attribute almost everything to "teething" or "worms" or "billiousness" the disease might be mistaken for any one or all of these. Some of the manifestations might be mistaken for syphilis, tuberculosis, chronic alcoholism, or approaching amentia or insanity.

Pellagra also in some of its features resembles beri-beri, ergotism and leprosy, but there is little difficulty in distinguishing it srom these diseases.

Pellagra appears to be primarily a lodgement of a toxic principle in the alimentary canal, and is believed to be caused from a micro-organism which has not been definitely isolated. The first symptoms indicate a toxemia which affects the cerebro-spinal centers. Among the earlier manifestations are headache, vertigo, impairment of vision, indifference to either mental or bodily exertion, a sense of fatigue, despondency, nervousness, insomnia, impaired memory, &c. These are accompanied or followed with a perverted appetite, sore mouth, a glazed tongue, nausea and vomiting. diarrhea, or sometimes the very opposite, obstinate constipation, the appetite may be voracious, but eating does not satisfy, and there is a loss of flesh, the diarrhea persists, the bowel movements become offensive, the abdomen swollen and tympanitic, the gastro intestinal disturbances are persistent and do not yield to the ordinary medical treatment usually resorted to in such cases. The mental and nervous affections increase, the mind becoming more clouded and impaired, the normal reflexes are deranged, the gait is unsteady, and symptoms of ataxia may be present. The erythematous appearanee on the skin may be seen early, but frequently does not appear until after the nervous and digestive ailments have been noted, and cases have been reported where the skin affection did not appear until late in the disease. When first noticed it usually appears on the back of the hands and arms, neck and chest, and sometimes on the back, most commonly, however, on the exposed parts of the body, and on the dorsal side of the feet in those who go barefoot.

The skin at first resembles sun-burn, or a mild eczema, and appears simultaneously on both hands or arms, &c., being symmetrical in whatever locality it occurs. There is a sense of burning and itching and slight puffiness of the skin at first, and later the epidermis dries and scales off, the red color disappears or rather changes into a dirty brownish color. Finally the skin is thickened, bronzed, wrinkled, hard and rough, presenting the peculiar appearance that gave the name, pellagra (rough skin) to the disease.

The disease makes its appearance in the spring of the year, and the symptoms increase until toward the late summer, and then subside to a degree, and as winter comes on almost disappear, but the following spring come again with renewed activity, all the symptoms of the previous season are intensified, and thus from year to year it may go on for an indefinite period varying from one to ten or fifteen or more years. Cases occur, however, which are much more acute, and the disease runs a rapid course, terminating in a few months.

As a rule, the approach of the malady is insidious, and creeps on one unawares, and is not attended with manifestations such as accompany most of the serious and fatal diseases with which we are familiar. This very fact should excite the keen study and observation of physicians, for an early diagnosis is of prime importance in the treatment of the disease. It is only in the early stages that we may reasonably expect to cure the disease, for while we may be able to mitigate it in its later stages, it will be most likely to complete the wreckage of both body and mind, and death will come to relieve the hopeless sufferer from the toils of the relentless malady. The later stages of the disease are attended with increased mental and nervous phenomena, such as hallucinations, delirium, or increasing dementia, attempts at suicide, sleeplessness, convulsions, uncontrollable diarrhea, great emaciation, an increased roughness and wrinkling of the skin, the roots of the nails show small abscesses.

There may be paralysis of the sphincters, incontinence of urine and feces, profound loss of sensation and motion, and death closes the deep dark oblivion of the hopeless and helpless sufferer.

From what has been stated it is clearly evident that whatever may be the original cause, the toxemia resulting makes its inroads chiefly in the cerebro-spinal and sympathetic nervous systems, and that the trophic changes which affect the digestive tract and skin are secondary, and result from a protracted toxemia producing destruction and degeneration of cell life, impaired or abolished metamorphosis of the tissues of the body and brain and the corresponding impairment and loss of mental faculties.

The treatment of pellagra is primarily and chiefly dietary, and change of environment. An effort should be made to thoroughly cleanse and disinfect the alimentary canal, by purgation and enema, and then for the diarrhea use the ordinary remedies for chronic bowel disturbances. Tonics are usually indicated. The arsenical preparations stand at the head of the list. As an alterative, calcium sulphide has been highly recommended. Bromides or other hypnotics are required for the nervous disturbances. The skin lesions may be relieved with antiseptic lotions, and various ointments. From present opinions the patieut should be isolated from immediate contact with other persons. The discharges both from bowels and kidneys should be disinfected and destroyed, or buried. For all we know flies may be a medium of carrying the disease. Having no specific, such measures should be adopted as appear to be from time to time indicated. For the prevention of the disease good and substantial food, well cooked, and of proper variety should be recommended and provided. The State must take more rigid observance of grain and food stuffs, and enforce and re-enforce the pure food laws.

A grasping and conscienceless commercialism should not be allowed to place its iron heel on the necks of the people, by an unholy traffic in diseased grain or spoiled and damaged food products, whereby endemics and epidemics of disease are precipitated on an innocent and confiding public. We are not a socialist, but it is high time in this age of progression and advanced civilization that the government should look well to the dietetic and hygienic conditions of the great masses, and especially of the indigent members of society.

Pyelitis.

By Robert C. Bryan, M.D , Richmond, Virginia.

Mr. President and Members of the Tri-State Medical Association:

The reason for calling your attention to pyelitis is two-fold.

First, it is not at all an uncommon condition, and

Secondly, in selected cases is most rapidly benefitted or cured by direct pelvic medication.

The kidney by virtue of its enormous, essential and enforced vascularity, subjected to the many insults of metabolic by-products, toxic ingesta, and a not infrequent bacteria coursing in the blood current, with a lining continuous with the outer world, lying behind the colon, (that cess-pool of waste material, and colon bacilli), insulted in certain instances by a preternatural mobility, spelling ureteral angulation and venous stagnation, it does not appear that we have to look very far to recognize some of the causative factors of cloudy swelling, catarrhal desquamation, epithelial proliferation, vascular injection, mucosal thickening, replacement fibrosis, which, occurring in the renal pelvis, embarrasses its normal physiological peristaltic wave, favors retention and thus invites infection.

It is not desirable at the present writing to enter deeply into the etiology and pathology of pyelitis. These classifications and considerations are better and more fully disposed of in all appropriate text books. Nor do we wish to consider that variety of pyelitis contingent upon mechanical insults, as urethral strictures, prostatic obstruction, phimotic stenoses, ureteral calculi, kinks, folds, strictures (for Bottomly has shown that stricture of the ureter is not uncommon), rumors, blood clots, hydatids, trauma, appendicitis, parasites, pelvic and abdominal tumors, Pott's disease, cancer of the cervix, or the pyelitis of constitutional disease as in tabetics, paralytics, septicaemia. The variety of pelvic infection which we desire to take up is that category of catarrhal outbursts, which are independent of mechanical or adynamic causes, but traceable rather to metabolic or short-coursed septic influences, such as rich, highly seasoned food, intemperate habits, habitual overdistension of the bladder from neglect of the physiological function of micturition, acid urine, exposure to cold, sudden chilling, constipation, drugs, the stagnation of general visceroptosis, coloptosis in particular, parotitis, carbuncle, tonsillar abscess. In these latter instances, the pelvis of the kidney is irritated not only by the products of a concentrated febrile urine, but by innumerable bacteria and their toxines. Here the pathological reaction is greater and it is in this class of cases that the avenue is now opened to stone formation, perinephritic abscess, renal degeneration or tubercular pyelonephritis.

That a floating kidney of marked degree may at times give rise to such venous congestion as to develop transitory pyelitis cannot be gainsaid. It would seem to be founded upon the clearest mechanical principles, and in this instance, anchorage alone could cure the inflamed pelvic mucosa.

As a further etiological factor for our simple variety of pyelitis, must be mentioned those aberrant arteries running to the kidney, which, according to Brewer, is present in 20 per cent. of all cases; these arteries compressing the lower pole of the pelvis produce retention, with consequent stagnation, and ultimate infection, and must be regarded as an unavoidable, congenital cause curable only by operation.

In pregnancy, pyelitis is not at all an uncommon complication and usually develops in the later months, it may appear at any period, for, aside of the double physiological strain thrown upon the kidneys, the pelvic and abdominal pressure, vesical and ureteral interference, costiveness, capricious diet and irregularities, there is an eversion of the urethral mucosa, a vesical inertia, and intestinal atony, which invite infection and predispose to pyelitis.

Infection of the renal lining is a complication which the gynecologist searches for daily, and guards against by dietetic and medicinal measures, for the stepping stone from a severe grade of pelvic inflammation to involvement of the renal substance, with its train of surgical invoices, is not a very wide one—only the width of the lining of the pelvis. Ureteral catheterization and pelvic lavage is not contra-indicated in the pregnant state.

Pathology.—The involvement is usually bilateral, mechanical reasons would seem to favor the right side. In the writer's series of eight cases, seven times the right pelvis alone was involved. This is readily explained in the pregnant state, for here the uterus in its second stage of evolution tends to the right and thus compresses the ureter where it crosses the pelvic brim.

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*Read before the Columbia meeting of the Tri-State Medical Association February 21-22, 1912.

The degree of inflammation in the pelvis varies from a slight catarrhal desquamation to a marked suppuration. The usual type shows the mucous membrane swollen and congested, with urinary salts mixed with fibrin and blood deposited here and there. In the chronic type there is a thickening of the mucosa and sub-mucoid structures, ulceration may be present, with minute suppurating foci scattered about, finally one focus breaks through, and perinephritic abscess is inaugurated.

With the shed off epithelium, accumulated pus, urinary salts, and debris blocking the ureter, pyonephrosis or pyelonephritis results. Bright's disease, both the parenchymatous and interstitial varieties, may be traced at times to the door of a pre-existing pyelitis, the difference being that in a primary nephritis the interstitial growth is in the cortex, rather than in the medullary part of the pyelonephritis.

Recent scientific investigations seem to indicate that infection of the renal pelvis is more prevalent than heretofore believed. The infection takes place by either the lymph, or blood vessels of the ureter, with strong evidence pointing to the lymph chain exclusively, for a degree of infection marked enough to establish itself by way of the blood current, only in the ureter, and nowhere else, would seem improbable.

The lumen of the ureter is but rarely the means of infection between the bladder and the pelvis; again, the fact of it being a pyelitis and not a nephritis, pyelonephritis or pyonephrosis would seem to substantiate the claim that the infection was ascending, that is, by way of the lymphatics, and not hæmatogeneous infection, which means capillary plugging, cortical foci of degenerated areas, triangular infarcts or suppuration.

In those instances of pyelitis where the infection starts from below and by way of the lymphatics so transfers the septic organisms, coli bacillus, streptococcus pyogenes, staphylococcus pyogenes aureus, and B. typhosus, pneumococcus and pyocyaneus from the urethra, prostate, bladder, caput coli, infected retroperitoneal lymph glands, or careous osseous foci, to the kidney pelvis, the pathological expressions and morphological findings would be considerably increased were an intercurrent infectious disease, grippe, scarlet fever, pneumonia or typhoid to add its specific variety hæmatogeneously to the already congested area, for now septic thrombi are established, minute foci of pus are formed, which later coalescing form large cavities, riddling the organ. Such cases are clearly beyond the province of mechanical washings to clear up, they are for the surgeon's knife, not the catheter.

The associate ureteritis is directly dependent upon the intensity and character of the infection of the pelvis above. In marked cases of pyelitis the congestion and thickening in the ureter is considerable, the mucosal injection narrows the lumen, its normal peristaltic wave is interferred with, there is a slight retention always in the pelvis, which now and then is further aggravated by shedding off of the pelvic epithelia, or increased output of urine, thus a transient pelvic tension or low grade hydronephrosis is started up, and pain inconstant, not marked, is brought out as one of the symptoms of pyelitis.

This pain is referred to the loins, and about the kidneys, as a heavy, dull feeling, but is of severe character, however, when there is a temporary "kidney block." In associate ureteritis, there is pain also along the course of the ureter as far as the neck of the bladder, in rarer instances, when the entire ureter is involved, the pain is referred to the genitals or even the knee. This pain is not made worse by the act of urination, possibly slightly helped for a short while, but there is a constant and imperious desire to urinate, and it is for this reason that cystitis is so frequently diagnosed. In pyelitis, however, there is *no tenesmus*, which must obtain with pronounced vesical infection.

The patients have found that drinking large quantities of water helps the pain, a consequent physiological polyuria ensues, but the urine is highly acid, shows much mucous and pus cells, a trace of albumen, hyaline casts, blood and considerable caudate epithelium from the pelvis and the ureter. These caudate cells are smaller than those from the bladder but can be almost positively identified as such with the microscope. The persistent acid urine, slight lumbar pain and polyuria should put the physician on his guard, and in the absence of other clinical expressions point strongly to involvement of the pelvic epithelium. Occasionally there is an oliguria or anuria from reno renal reflex.

The rise and fall of temperature is most irregular; its irregularity attracts our attention for it is directly due, as already said, to the degree of pelvic stasis and absorption; a frequently recurring and high temperature would seem to indicate a severe degree of infection. When the urine becomes very purulent the temperature falls and pain is diminished. The frequent urination, the persistent acidity of the urine, and the irregular, uneven temperature, with the indefinite, obscure lumbar pain, are the most valuable outward and visible signs of an inward and renal disease.

To substantiate the diagnosis and to differentiate it from a cystitis the cystoscope is now employed. By its use the character, size, injection or involvement of the bladder is immediately noted. The ureteral mouths are located, and in instances of severe pelvic infection with marked ureteritis the os is red, turgid, swollen with small, injected vessels radiating back into the vesical mucosa. This picture, however, is but seldom seen, for the ureteral inflammation usually is limited to its upper segment, and does not show inferiorly.

The catheter shows also whether stricture, fibrosis, angulation, kinks, folds, or misplacements of the ureter are present, and on gaining the pelvis, decides its capacity, the character of the urine and nature of infection.

The normal pelvis holds between 11 and 20 c.c. Women slightly less than men. Any amount over 25 c.c. may be considered as pelvic dilatation. When the pelvis is emptied of its contents, there is usually a freer flow of urine for several minutes; this is explained by the mechanical irritation of the kidney secreting tubules, by the presence of the catheter. Edebohls admits that the immediate increased renal activity, following his suggestion of decapsulation for chronic nephritis, may be explained by the massage, the mechanical stimulation, and excitation which the organ gets during operation. Walsh reports a case of suppression of urine, following an attack of ptomaine poisoning, two ounces of urine having been made in 72 hours. Ureteral catheterization produced three ounces in six hours, explicable, by direct, mechanical, renal stimulation. This would seem to indicate that there is a passive "renal glaucoma" going hand in hand with a catarrhal pyelitis, or, in other words, that pelvic lavage not only cleanses the pelvis, washes out the debris, but stimulates the kidney to further secretion.

Along this same line of thought and for the same reasons, Pasteau causes a distension of the bladder for increased renal activity, and injects 150-160 c.c. boric acid into the bladder three times a day. This stimulation, however, is contra-indicated in cystitis.

The pain about the kidneys, the low grade of headache, lassitude and constitutional depression, may be traced to a lessened output of the kidney, which in turn would appear to be rationally placed at the door of this mild, venous congestion, stasis, "renal glaucoma" which must be dependent upon the degree of pelvic inflammation, for it is not beyond the realm of pathology to recognize such constitutional manifestations in other hollow viscera undergoing inflammatory degeneration, as in cystitis, cholecystitis, colitis, etc.

In skilled hands catheterization of the ureters is absolutely painless and harmless, and rapidly differentiates a right abdominal discomfort, the pain of appendicitis and cholecystitis from that of pyelitis, and would seem to be indicated particularly in those instances where the thick, cloudy, purulent urine, stormy symptoms, and high temperature are absent, for the microscope cannot always interpret mathematically the personal equation or cellular damage done to an organ. Bilateral infection in the pregnant state is the rule. This indicates that the mechanical insults of the pregnant womb upon the ureter, and the resistance offered the flow of urine is greater than has been heretofore reckoned. The writer recalls one case in whom a single catheterization was greeted with the most flattering and excellent results. This of course is not the rule, but the exception, usually several catheterizations and irrigations have to be performed before a decided change for the better is noted.

Diagnosis.—As in other inflamed mucous surfaces of the body we find in pyelitis constitutional expressions which are of a more or less severe grade dependent upon the degree of the pathological lesion. Vomiting is not uncommon, the fever (as already mentioned) is irregular and at times followed by profuse perspiration, gastro-intestinal upsets, particularly in children, are to be expected. The kidney is no more palpable than in the normal condition. Deep pressure should bring out discomfort and start up an indefinite pain radiating to the penis, testicle or even towards the shoulders. The abdomen is not distended and palpation is not minded by the patient.

In unilateral involvement, discomfort of the same side would be expected. This does not invariably obtain, for there is a peculiar and not thoroughly understood dissociation of the renal nervous system, as instanced in an unilateral stone impaction, producing anuria; the pain of ureteral stone referred to the opposite side, or in pyelitis the pain and discomfort being regularly referred to the bladder or even urethra. Only recently the writer had the occasion to see a distressing podalgia *of the opposite side* from a renal calculus. If only one kidney is involved, there will be times, when owing to a temporary kidney block, the urine will be normal. This must not be misleading. The dysuria and pollikiuria, the character of the urine, and its varying features signify inflammation of the urological tract. From renal involvement, the following may be noted:

	Pyelitis	Kidney
Albumen	Dependent on blood and pus	Essential
Casts	None to be found	Granular
Nucleo-Albumen	Large amount, distinctive of	
Leucocytes	Poly-nuclear	Mononuclear
Pain	More or less severe	Insignificant
Caudate epithelium	Larger	Smallest

It is with cystitis particularly that inflammation of the renal pelvis is so frequently confounded, many days or weeks being lost in irrigations of the bladder and topical applications, which cannot be of any benefit to the patient.

	Pyelitis	Cystitis
Urine	Acid	Alkaline
Albumen	3-10 % plus	1-10 %
Casts	None	None
Epithelium	Smaller caudate	Cuboidal & larger caudate
Irrigation	Bladder cannot be washed clean	Bladder can be wash'd cl'n
Irrigation	Not painful	Apt to be
Cystoscopy	Not painful. Debris seen emitting from ureteral mouth	Painful Ureteral mouths normal
Catheterizing ureters	Urine cloudy, flaky	Urine clear

Treatment.—The object of this contribution is to emphasize and bring out the value of pelvic lavage in selected instances of pyelitis. It is not suggested that the pelvic reaction to the hordes of germs passing over, and inflaming its mucosa in certain exanthemata, should be further insulted by the mechanical use of a foreign body, catheter, and direct instrumentation; rest, liquid diet, hot tubs, urinary antiseptics, and care of the bowels and skin will in most instances bring about a favorable resolution.

Nor is irrigation to be considered of any benefit in those cases of pyelitis contingent upon mechanical embarrassments as mentioned early in this paper, stricture, prostatic hypertrophy, pelvic tumors, etc. Surgical intervention alone can help in these instances. Nor can ureteral catheterization and pelvic lavage be employed in the child. The writer's youngest patient was a girl of twelve. About this age would seem to be the limit for the use of the cystoscope and catheter. There were also two children between four and ten in whom irrigation was indicated, but no instrument has been made small enough to be of consistent practical value. The field then would appear much restricted, probably more so than it usually is. Five of the writer's patients were women. Two in the latter months of pregnancy, three with children aged respectively two, six and ten months. In all of these cases the gravid womb with its mechanical interference to the ureteral flow would appear to be the contributing cause. It would be difficult to register the percentage of low grade pyelitis associated with the pregnant state. At delivery the pressure is removed, the pelvic glaucoma is released, and the inflammatory state clears up. The more aggravated types of "pyelitis of pregnancy" may resolve a few weeks or months after delivery, or go on to the chronic state with involvement of the kidney substance.

It is in this form of pyelitis, "the pyelitis of pregnancy" that ureteral catheterization and irrigation is primarily indicated and has its greatest field of value.

The insertion of the cystoscope and introduction of the catheter to the kidney is not painful. The writer has never had to give an anæsthetic. Occasionally three to four inches from the ureteral mouth an obstruction is met, shown by the catheter doubling into the cavity of the bladder. This occurs more frequently on the right and is doubtless explained by an undue pressure brought to bear upon the ureter by the expanded womb where it crosses the pelvic brim. Rolling the patient to the opposite side does away with this obstruction.

The pelvis is washed out with sterile water or boric acid, followed by a 25 per cent. solution of argyrol or 30-40 per cent. solution of cargentos. This latter solution is left in the pelvis and the instrument and catheter withdrawn.

The immediate relief and comfort experienced by the patient may be explained in one of the following ways, along purely mechanical lines.

1. The catheter straightens out the ureter and thus affords a better vertical drainage.

2. It dislodges much dead epithelium and inspissated debris and gives a larger lumen.

3. The temporary anæmia is followed by a reactionary hyperæmia which induces a

further desquamation and a nearer return to the normal.

4. Congenital ureteral stenosis of moderate degree are dilated by the catheter and thus relieve the back pressure above.

5. The catheter tending to straighten out the ureter, breaks up peri-ureteral bands in the extra-peritoneal tissues which may have dislodged or kinked this tube.

Many of the above suggestions appear theoretical. Be that as it may, the fact remains that there is a remarkable dislodgement and narrowing of the ureter in cases of pyelitis, tumors, growths and diseases of the kidney proper.

The writer has had the opportunity to notice this on a good many different occasions. The irrigation is carried out every second day for a week or two, then every third day. By this time the condition has cleared up to a most gratifying degree, and the frequent and annoying calls for urination are considerably better, the constitutional depressions are disappearing and the picture is a much more cheerful one.

If after six or eight treatments the progress has not been satisfactory, an X-ray of the pelvis should be taken for stone, or for some supprative process in the kidney proper. This is done by staining the pelvis with cargentos 35 to 40 per cent. and taking the skiagraph immediately.

In one instance a suspected chronic pyelitis proved to be a congenital polycystic kidney requiring removal. Had the kidney not been stained and photographed, a positive diagnosis would have been imposisible.

The outline of the pelvis is carefully noted from the skiagraphed picture, any encroachment upon the renal parenchyma indicates a pelvic dilatation; a bulging into the kidney of the shadow would point to loss of substance; irregular sinuous tracts spell suppurative foci. The plates should be minutely studied, the ureteral calibre and its uniformity are very significant, and in a large measure assist in predicting the termination. Pyelography is being practiced more and more daily, and is of the greatest value in determining the mode of surgical attack.

Here it may be mentioned that pelvic lavage in pyelitis should be a splendid preventative to stone formation, for the formation of pelvic calculi is distinctly dependent upon the pathological picture we see in the condition of chronic pyelitis. There must be some nidus to invite the precipitated crystals to rest a bit, until, many others swelling the number, begin stone building. This would hardly occur in a clean, sweet pelvis. Along with the local application to the inflamed mucosa, the diet is restricted to the lightest possible, preferably milk, the patient is encouraged to drink plenty of alkaline fluids, and urinary antiseptics are given with a free hand. If benzoate of soda is combined with the formin compounds, it may be given freely, with no bad results, up to two or three drachms daily.

Rather free purgation and intestinal antiseptics must be carried out at all stages of the disease, particularly if the infection is the colon bacillus.

Repeated catheterizations, irrigations and occasional pyelographs, give an accurate, scientific interpretation of the progress of the disease. The patient looks forward to the ordeal with pleasure, and experiences such genuine relief that they want to come oftener than every other day. They should not be encouraged in this.

The Conservative Obstetrician.*

By A. Bascom Croom, M. D., Maxton, N. C.

In the field of obstetrics, like other sections of the medical man's work, there are to be found various men of various opinions and methods. These opinions and methods, when studied, will be found to range from one extreme to the other. One man who interferes on all occasions with his methods may be regarded the radical man—the other the cautious or conservative man, because he never does anything. But this is not the stripe of man which the author intends to speak of as the conservative. One man never has a case which gives him the least trouble or requires any study on his part; the other never has any other than the most complicated case. The radical man tells of how important it is that the forceps should be at hand before labor has made any advancement and how preparation should be made early for Cæsarean section or other radical steps. The man of the other extreme has no forceps, never needs them and perhaps has no knowledge of Cæsarean section beyond some description which he has read.

Interference by some may be from a purely mercinary view, and failure to interfere in other cases may be from a lack of interest or knowledge and consequently a desire to excuse himself for the failure.

Many kinds of obstetricians, therefore, are to be found; still it is not the purpose of this paper to criticize, but rather describe what we regard as "The Conservative Obstetrician," which means the safe man. The conservative obstetrician is by no means a "do-nothing" man, nor is he anxious to interfere with nature when no indication is present. He may well be regarded or termed the ideal obstetrician. He is a happy medium—a sensible combination of the radical and the conservative. In other words he knows his business.

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*Read before the Columbia meeting of the Tri-State Medical Association February 21-22, 1912.

There are times when emergencies are to be met and radical steps are to be taken. He recognizes the emergency and is fully prepared to handle the radical operation indicated. There are also times (and these are many) when nature is fully able to take care of the condition. Here he recalls the wonderful powers of nature and is wise in quietly sitting to await results.

In order, then, that a man shall be conservative he must know how and when to be radical. He must know the individual peculiarities of his patient as far as possible and how far to trust and just when to distrust these powers. He should have not only a thorough knowledge of anatomy in a general way, but familiarize himself with the anatomy of the case before him. Pelvic measurements and other careful means of study give to the obstetrician a confidence which he cannot otherwise possess, and this in turn inspires confidence of the patient, thereby reducing to a minimum the agony on her part of apprehension that something awful is going to happen. Assure her, if conditions will justify the position, that nothing awful is going to happen; but by all means let her know that if it should you are thoroughly prepared to handle it. Be sure that everything possible in the way of study of the case is done, and having grasped the entire situation by preparing yourself for any emergency, including not only a full knowledge as to the patient's peculiarities, her general condition and especially the condition of her kidneys, but also to see that all necessary preparation is made in the way of all sterile instruments which could possibly be needed, sterile towels and sheets, a competent nurse as an assistant, solutions, sterile rubber gloves, &c., then it is we can feel assured that practically any condition which might arise is at once under our control.

Preliminaries are necessary if we are to be assured and perfectly easy. The fœtal heart is of importance, for we would fall far short of duty if the life of the unborn were unduly sacrificed. Be not slow to employ forceps at any stage if indicated by condition of either mother or child. Be your own judge as to when and how to interfere if it becomes necessary to do so, and remember that the least interference is best. Do not resort to Cæsarean section if a simple forceps operation will answer as well; and refrain from even the forceps if a slight manipulation will release the presenting part and allow nature to go on. Do not forget that nature can do much which to some might seem impossible and can do it much better and with much less damage, even though a little more time is required.

The obstetrician is never justifiable in employing forceps for his own convenience on account of other calls awaiting him which another man can make, and when he rushes his cases for this reason he should be classed as a mercinery obstetrician just as much so as if he did it for the purpose of exacting a larger fee or making the impression that the patient would never have gotten through except for his valuable help. He should do as little as is consistent with good judgment, remembering the various factors as dangers to mother and child. Also the necessary exhaustion in long delayed deliveries.

And now a word as to the suffering of the prospective mother. Is it proper to employ forceps or other interference when labor is making normal progress? Can we afford to take risks of interference purely in consideration of the patient's comforts? I should say 'no' when the progress is perfectly normal and reasonably rapid. But in my opinion we can and should take a hand, so to speak, when reasonable time has been given and contractions being insufficient progress is no longer being made. In other words, when we are confronted by an extremely slow labor, a tired and worn-out suffering woman, and perhaps a similar condition of the child indicated by fœtal heart sounds, there can be no reason for further delaying our interference, and especially when the application of the forceps to a well descended but arrested head will save the patient 24 hours or more unnecessary suffering, even though we admit that in this given time nature might effect a delivery.

This man I would regard as conservative and would go further and say that if he failed in this he is in a measure negligent of the comforts which are due his patient.

Along this line there are other points to be remembered. The patient is entitled to every comfort and every relief consistent with the safety of the two lives involved. The routine use of chloroform for a complete anaesthesia is to be condemned, yet there is no reason why practically all our patients should not be allowed a small amount of chloroform just before or during the delivery of the presenting part for the analgesic effects. They should likewise have a constant warm application over the vulva in the form of sterile pad or towel thoroughly wet with a warm solution of bichloride which adds greatly to her comfort and saves lacerations by admitting elasticity of the muscles.

In this connection comes also the consideration of drug administration. As to the occytoxic remedies, I believe they are often indicated and of great value, though I fear many lacerations are the immediate outcome of their employment either too freely or in cases which are making sufficient progress without them; therefore, as in other features of labor, they should be used only when indicated and not as a routine or to help the busy man on to his next case. Quinine, in my experience, is the drug of choice, and never ergot, as I see some men use. Ergot as a routine after the completion of the third stage, but never earlier. As to drugs for the relief of the patient's suffering or as her request is usually worded "for the pains," they do just what she wants done—relieve the pains, and unfortunately retard or in some instances entirely stop the progress of labor. I am sorry to say that my observations and experiments here have been to show that as yet we can do little or nothing for them without overcoming the good with evil. I have employed hyoscine and morphia in a series of cases with most excellent results from the standpoint of the mother, but almost invariably with bad effects to the child. The last one of my series gave me a baby so blue and cyanosed that I promised to discontinue my experiment. I would add, however, in deference to the men who report favorably on this method that my experiment was not extensive—a dozen cases perhaps.

I regard this no small part of future developments in the obstetric field and hope to hear more extensive study on the part of some one along these lines, and that some method can be had to save the women some of the suffering which at the present appears unavoidable.

As to the conduct of the stages of labor, I do not wish to go into this in detail. The third stage should complete itself within a half hour after the second (which it usually does not), otherwise we should give assistance. This is done by the bimanual method of Crede familiar to us all, and I would simply call attention to the importance of passing the internal hand or finger entirely back of the placenta rather than use traction with it, because it is so easy to tear off and leave behind some part of it, causing future trouble.

And now as the case is about finished we come to the consideration of complication of frequent occurrence—lacerations—a torn cervix or perineum. Authorities will differ as to the time at which these repairs should be done, but as for my own position, I have never seen any reason for difference of opinions. A man has only to do a few recent cases and a very few old ones to be fully convinced as to which is easier and which gives better results. By all means make repairs while they are fresh unless there is some special complication. A recent perineal tear can almost invariably be successfully repaired without a complete anaesthesia, for the patient is to some extent insensible to a little thing like a needle puncture after undergoing the ordeal of labor. A few deep sutures of catgut will, therefore, do a thorough repair and save a subsequent operation, involving the loss of old scar tissue and mutilation. The success or failure of the operation will depend upon a scrupulously clean and careful nurse as does a perineorrhophy at other times.

And now to sum up the requisites of the conservative obstetrician. He must know when as well as how. He should take every precaution for both mother and child, and yet he should not be so cautious as to allow either to come unnecessarily near the danger line. He should save his patient unnecessary suffering and time. He should be entirely free from any consideration except as to the best interests of the patient. He should keep himself thoroughly abreast of the times and familiar with the methods of others in order that he may know that his patient gets the best. He should be adequately paid in order that he can do good work, without being hampered financially.

Iodipin in Cardiac and Arterial Disease.

As a substitute for iodides, A. Gorbatow believes that iodipin is especially worthy of notice, since it can be used subcutaneously and is therefore suitable for cases where the internal administration of the iodides is impractical or impossible. Among other advantages he mentions an improvement of the general condition, regulation of the bowels, better sleep and alleviation of pain. The author injects 25% iodipin daily without interruption for thirty days, but in smaller doses than are generally recommended. For arteriosclerosis, two such series of injections are given every year for two to three years. Good results from such treatment were also seen in angina pectoris and stenocardia, particularly where the vessels of the heart were affected. The histories of ten cases are given in full detail. They included severe cardiac lesions, usually complicated by arteriosclerosis. In the great majority of cases, no other drugs were ordered except occasionally a small dose of sodium bromide. Nitroglycerin and amyl nitrite, particularly, were avoided. The results in all cases were excellent and much better than one is accustomed to see after the iodides.—Wratschebnaja Gaseta.

Charlotte Medical Journal

Published Monthly.

EDWARD C. REGISTER, M. D., EDITOR

CHARLOTTE, N. C.

LABORARORY DIAGNOSIS OF DIPHTHERIA.

Diphtheria being a reportable disease in most localities and subject to quarantine should have a more definite status thanepists.

There are still occasions, when on his first visit the physician observes a patient presenting signs of severe toxemia, impaired respiration, fever, inflammation of the upper respiratory tract and pseudo-membrane formation. The diagnosis in such cases is obvious and needs no comment. But a large number of persons afflicted with diphtheria do not present symptoms nor signs upon which a diagnosis can be made, the first or second time they are seen by the physician. Under such circumstances it is customary, and by some health authorities made obligatory, for the attending physician to swab the patient's throat, make a smear from the swab and send both swab and culture to the communities' health officer.

The health officer examines the material submitted, microscopically, for diphtheria bacilli, and if such are observed the person from whom the organisms were derived is quarantined until subsequent microscopic examination of smears from his or her throat show diphtheria bacilli are no longer harbored.

This is a very unjust and extravagant method of proceedure.

It is a well established fact that many bacteria exist and frequently inhabit the oral cavity of man which are incapable of producing disease but which cannot be distinguished, microscopically, from the true diphtheria bacillus. A great number of healthy people carry these non-pathogenic organisms constantly, for long periods, and suffer no ill effect and are not a source of danger to their associates. Recently an examination of one hundred healthy students, made by Dr. Roddy in Jefferson Medical College, showed that more than 15% of them had in their nose, pharynx or throat bacteria which were morphologically indistinguishable from the true diphtheria bacillus and it was proved that these organisms were incapable of producing disease.

The true diphtheria bacillus produces toxine and kills guinea pigs. Other organisms which resemble it morphologically do not.

All honest laymen and physicians realize the propriety of quarnntining diphtheria patients and are willing to abide by it even though it causes personal inconvenience and loss of time and money. To do so is their duty. It is likewise the community's duty and that of every health officer to studiously avoid putting patients and their physicians to unnecessary inconvenience, loss of time and loss of money.

Every time a patient is quarantined for diphtheria it means a loss of time and money to him and his physician which amounts to many dollars. When such a quarantine is unnecessary it amounts to grave injustice. The cost of differentiating true diphtheria bacilli from other organisms is trifling, and for their own interest, if not for their patients', the physicians of every community should insist upon a change in the method of determining whether or not one should be quarantined for diphtheria.

Health officers who, through ignorance, indifference, or both, base their diagnosis of diphtheria on microscopic examinations alone, and neglect to test for pathogenicity should be replaced by others who will properly serve the community.

J. A. R.

THE PHYSICIAN AS A PATHFINDER.

The average medical man has no apologies to make to his contemporaries in other professions. If it is the office of those in one of these callings to teach virtue, the physician is an exemplar of charity. If it is the role of those in another to expound the law the average physician is the embodiment of honor. His life is devoted largely to the well-being of his fellows, and if, from a business point of view, he is successful, it is, as a rule, a success secondary to that which he regards as his highest ambition.

Yet, crediting the physician with these high qualities, it is by no means impossible that he owes an apology to himself. He is a member of a profession which delights to characterize itself as scientific. Does the average practitioner of medicine devote himself mainly or largely to the study of science?

We may well concede that the average member of the medical profession starts with an ambition to become proficient, even a leader, in scientific thought. Too often he proceeds at once to follow the well beaten path which his predecessors have marked out for him. He sets his aim for a large if not a lucrative practice and devotes his spare time to the perusal of such literature, if indeed he indulges in literature, as he imagines may give him already digested directions and receipts for the care of his cases. With every allowance for industry, patience, attendance upon the calls of duty, it must be confessed that the average man in the practice of medicine is, in too large a measure, devoted to precedent, following unquestioningly the dogmas of leaders, taking habitually the shortest and easiest methods to arrive at what he hopes may be the successful outcome of his cases, but he is unwilling to take that infinite pains necessary to a full comprehension of the fundamental principles or spend days and nights in seeking for new and better ways than those which he has learned at the beginning of his career.

He may be eager to remember the composition of the latest pill or tablet, is ready with his hypodermic syringe to inject the latest synthetic product, but the everlasting laws upon which the science of medicine should be founded are, too often to the average doctor, obscure, difficult, and therefore not worth the trouble of investigating.

Such an one may pride himself upon the assumption that he is a safe practitioner, for he wanders into no untried and follows only where others have led, therefore he is supposed to make no mistakes.

He who would be a leader in thought must devote much of his time to labor which offers no immediate reward. He who would strike out new paths need not abandon prudence nor plunge hap-hazard into vague conjecture, but he must take reasonable risks and he must learn from his own mistakes.

His science and his art must go forward and he must make for himself a path. It is not the man who is satisfied with a moderate effort to "keep up with the times" but the man who looks far ahead of his times who leaves his mark. Only a living hope for a new outlook and an infinite capacity for hard work can help the professional man to make a path for himself.

THE ANTITUBERCULOSIS CAMPAIGN.

The war against tuberculosis has been waged during several years with vigor and intelligence and has enlisted the active and devoted interest of many humane and public spirited men and women. A campaign of education has been instituted in our large cities where exhibits have been supplemented by lectures and, throughout the country, literature pointing out the dangers of contagion and the means of limiting the spread of the scourge has been, and is being, spread broadcast.

It is not to be expected that a disorder so widely prevalent and so long established and, withal, so pernicious as tubercular consumption would retire suddenly before the advance of modern methods of hygiene, nor, since practical specifics have been found to antagonize the bacterial legions which attack the strong as well as the weak, can a great proportion of cures be expected even under favorable circumstances.

As a practical fact a great proportion of those who present the early symptoms of pulmonary tuberculosis are unable to avail themselves of the circumstances now so universally conceded to be of essential importance in the treatment of the disease,—abundance of fresh pure air and a liberal supply of the most nourishing food.

Admitting all the advantages which may have resulted from the active and sincere antituberculosis campaign, and fully recognizing its necessity it must still be confessed that, along the lines commonly laid out, the hopes of those who have expected the enemy to beat a hasty retreat have not been realized. Some new weapon or weapons must be brought into execution before success can rest upon the banners of the attacking army. Consumption is not, as many enthusiastic friends of our hygienic methods were wont to exclaim not long since, "on the run." In fact the percentage of success is not great. It is then the part of wisdom to examine with judicial fairness new agencies which are suggested with reasonable evidences of their value.

An important one which comes within the category is the asserted fact that consumption is habitually, even almost always, found in the class of persons who have a characteristic carriage of the head in relation to the position of the body and that this characteristic attitude is that in which the head is habitually carried forward, the chin tending toward the chest, the forehead in advance of the general line of the body. It is said that this attitude is not only conducive to the disease but that it encourages its progress.

It is asserted that this habitual pose of the head by its mechanical action interferes with the force of the respiratory function, especially reducing the volume of air currents in the upper air passages where the ravages of tuberculosis most commonly commence.

It is further claimed that this unfavorable position of the head is induced by peculiarities in the adjustments of the eyes and that by long observation and by practical results on a large scale in modifying these adjustments it has been fully demonstrated that this unfavorable carriage of the head may be completely remedied, thus permitting full and free currents of air to enter the upper air passages and furnishing a more effective and a more continuous "fresh air cure" than can be attained by any other method. These ocular adjustments can, in the hands of one skilled in such matters, be modified with safety and with ease and the result is seen in an improvement in well being in many ways.

The propositions appear to be reasonable, and practical facts seem to demonstrate their truth.

If the results are as important and as successful as it is claimed, the method is one which the profession cannot afford to overlook.

Assuming a conservative view it is most desirable that every reasonable means of arresting the advance of tuberculosis of the lungs should be adopted and it would be a capital mistake to overlook a proceedure which appears to be available in a large number of cases.

THE USE OF DIGITALIS IN CARDIAC AND RENAL DISEASES.

In the physiological laboratory the administration of digitalis is followed by a uniform rise in blood pressure with a consequent slowing of the pulse. Here we are dealing with hearts that are normal or nearly so, and therefore the results are much more nearly constant than when we use the same drug clinically.

It is unfortunate that many practitioners, when they discover a heart murmur, think at once of digitalis. Nothing could be worse or followed by so disastrous results. In any cardiac lesion the treatment must be tentative for a longer or shorter period of time in order to determine the effects of the medication. The use of the sphygmomanometer is imperative if one is to be at all accurate in the use of digitalis in diseases of the heart or ktdneys.

There are certain cardiac conditions in which digitalis is contraindicated and certain cases of nephritis in which the administration of this drug is harmful, largely because of the deleterious effects upon the heart. In mitral stenosis digitalis is frequently contraindicated, especially if the heart occasionally misses a beat, showing a disturbance in conductivity. In mitral regurgitation the drug is not needed until the third stage, and even in this condition it will often not prove beneficial, as frequently rest in bed is all that is required, and the administration of heart stimulants has been aptly likened to whipping a race horse that is doing his very best. It has been frequently noted that the edema, dyspnea and arrhythmia will improve when a patient, who has been taking full doses of digitalis, is ordered to discontinue its use.

Other indications and contraindications for the use of this drug exist in the other cardiac lesions, but if it is borne in mind that each case is a law unto itself and treatment instituted with only that one case in mind, the knowledge of the powers and limitations of digitalis will become better known.

In the chronic nephritides the use of digitalis is frequently attended with excellent results. The amount of urine is increased together with the total solids, and the edema will disappear like magic. In other almost parallel cases the edema will increase and the dyspnea become worse. This condition is supposed to be due to overstimulation of an already overworked heart. It is often determined in cardiac insufficiency that the blood pressure is actually reduced by the continued use of full doses, and while the improvement in the general condition of the patient is the best guide to the administration of any drug, the use of the blood pressure apparatus is of inestimable value as to the efficacy of the administration of digitalis.

ECZEMA OF THE GENITO-CRURAL REGION.

In the Southern States eczema of the genito-crural region is a common dermatological condition seen by the general practitioner of medicine, and often is very sluggish in responding to the usual treatment for eczema. For these reasons it is interesting to look more closely into the etiology of this particular form or type of the disease. By the use of the microscope and by a careful study of the clinical appearance of the parts involved, with the history of the course of the eruption, one should be able to settle the question of the eczema being of a parasitic origin. If this is done in every case of eczematous lesions of the genito-crural region of long standing, it would be surprising to learn how many of these cases are true parasitic diseases. Fully 80 per cent. are of such origin, and the eczematous condition is merely secondary, due to the warmth and moisture of the parts, and the resulting irritation from scratching and rubbing of the itching area.

In the Tropics this condition is very common, and is known by the name of "Dobies Itch"; several varieties of vegetable fungi are found present in the scrapings from the lesions; two that are most frequently found are the small spore Tinea (Microsporon Audounni) and Microsporon Minutissimum of Erythrasma; sometimes the Microsporon Furfur of Tinea Versicolor; occasionally all three varieties of the fungi are present. Eczema Marginatum or Tinea Cruris is very similar clinically to "Dobies Itch," in fact it is very hard to draw a line of distinction between the two. The former is certainly not an uncommon disease in the Southern States, especially in the extreme

Southern State, Florida. In ten cases of eczema of the genito-crural region treated by the writer in the past year, eight were typical cases of Tinea Cruris, the small spore fungus found in all of the cases. Of the other two, one was a seborrhoic eczema, the other a chronic scrotal eczema in a gouty patient. Usually the clinical picture of eczema marginatum is sufficient for a positive diagnosis without the aid of the microscope, especially so in the early stages of the disease, or during cool weather when the parts are not irritated by perspiration, the slightly raised festooned-like borders sometimes extending out on the thighs or up on to the abdomen; occasionally the axillæ show the same condition, usually out-lying patches, exhibiting ring-like form are seen, before the condition has become eczematous there is slight scaliness present, though never marked. When not treated with an appropriate parasiticide the disease will exist for years; during the hot days of the summer months the warmth and perspiration of the parts produce a weeping, raw condition, which can be rightly called an eczema. It is surprising what prompt results are obtained when treatment is aimed at the destruction of the vegetable parasites which are the original cause of the disease. Sulphur locally in some form is the specific; if the parts are very acutely inflamed it is best to alternate a mild sulphur ointment, 1 to 2 per cent., with a soothing lotion something on the order of the calamine-oxide zinc lotion. With this treatment the best of results will be obtained, later using the official sulphur ointment.

EDITORIAL NEWS ITEMS.

South Carolina Medical Society.

The following preliminary program has been arranged for the meeting of the South Carolina Medical Association to be held in Columbia, April 16-18:

Public address (opera house, April 18, 8:30 p. m.) "The Medical Man and His Service to the State," Dr. E. A. Alderman, University of Virginia.

Address, Dr. George W. Crile, Cleveland, Ohio.

"Inguinal Hernia, Operative Treatment vs. the Truss," Dr. C. F. Ross, Anderson.

"Remarks on Twenty-three Consecutive Cases of Gunshot Wounds of the Abdomen with Two Deaths," Dr. Le Grand Guerry, Columbia.

"Bronchoscopic Extraction of Foreign Body from a Bronchus," Dr. E. W. Carpenter, Greenville.

"Anterior Poliomyelitis,''Dr. Chas. Greer, Greenville.

"Some Remarks on the Eye, Ear and Throat in Their Relation to Some General Diseases," Dr. Edward F. Parker, Charleston.

"A Pregnant Fibroid Uterus with Delivery at Term," Dr. J. B. Britt, Princeton.

"The Role of Drainage," Dr. H. W. Rice, Columbia.

"Investigation of Sources of Typhoid Fever," Dr. F. L. Parker, Charleston.

"The Surgical Treatment of Stone in the Bladder of Children," Dr. R. T. Ferguson, Gaffney.

"Complete Prolapse of the Uterus, Complicated with Pregnancy," Dr. J. C. Harris, Anderson, S. C.

"Preventive Medicine in Private Practice," Dr. Fillmore Moore, Aiken.

"Fœcal Infections as Related to Constitutional Disorders," Dr. Andrew A. Walden, North Augusta.

"Some Neglected Factors in the Etiology and Treatment of Enteritis," Dr. F. M. Durham, Columbia.

"Medical Ethics," Dr. Davis Furman, Greenville.

"Tumors of the Bladder," Dr. A. B. Knowlton, Columbia.

',Some Recent Observations on Salvarsan," Dr. C. W. Barron, Columbia.

"Treatment of Some Cases of Diseases of the Posterior Urethra," Dr. P. V. Mikell, Columbia.

"Female Reflexes," Dr. C. D. Rollins, Lake City.

"The Effects of Sugars and High Per Cent. of Proteids Upon Fermented Disorders of Children," Dr. William Weston, Columbia.

"The Medical and Surgical Treatment of Gall Stones," Dr. Joseph Graham, Durham, N. C.

"The Necessity for County Medical Associations in Relation to Medical Legislation," Dr. A. Moultrie Brailsford, Mullins.

This arrangement of papers will not necessarily appear on the final program.

The officers of the association are: President, Dr. J. W. Jervey, Charleston; secretary, Dr. E. A. Hines, Seneca; treasurer, Dr. C. P. Aimar, Charleston.

The Marion Hospital, at Marion, N. C., under the management of Dr. Gaston B. Justice has just been opened for the reception of patients. The hospital is well equipped and each department under the immediate supervision of a competent physician. Dr. Guy S. Kirby has charge of the children's ward, Dr. Justice that of the surgical department, while Drs. Jonas, Ashworth and Morphew will co-operate and consult with the other physicians at all times. The building is well situated, commanding a fine view of the Blue Ridge mountains, and will be a cool, comfortable, home-like place for patients during the summer months.

The new City Hospital, at Columbia, S. C., was formally opened on March the 5th. It is one of the most complete and up-todate hospitals of its kind in the South. Its equipment is most magnificent and thoroughly comfortable and convenient in every department, The erection and equipment of the new hospital was done at a cost of about $65,000.

A movement is under way to establish a public hospital in Chester, S. C. The movement was thoroughly discussed at a meeting of the Chester physicians a few days ago. All the local physicians will be urged to become interested in this new enterprise.

Dr. A. S. Mitchell, chief of the United States food and dairy inspection bureau of St. Paul, Minn., has been chosen by President Taft to succeed Dr. Harvey W. Wiley as chief chemist of the department of agriculture.

Book Notices.

Pellagra. By George M. Niles, M.D., Professor of Gastro-enterology and Therapeutics in the Atlanta School of Medicine, Atlanta, Georgia. Octavo of 253 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1912. Cloth, $3;00 net.

We are glad to have the privilege of reviewing the first book concerning pellagra, written by a Southern physician. In fact this is the first volume on this subject written by an American author.

Dr. Niles has divided his work on this subject into ten chapters entitled as follows: I, General Considerations, Historic and Otherwise; II, Pellagra in the United States; III, A Discussion of the Etiology of Pellagra; IV, Symptomatology and Clinical Course of Pellagra; V, Clinical Reports and Description of Cases of Pellagra from Different Sources; VI, Pathology and Morbid Anatomy of Pellagra; VII, Diagnosis, Course and Progress, and Prognosis of Pellagra; VIII, The Treatment of Pellagra—A Discussion of Different Methods; IX, The Prophylaxis of Pellagra; X, Descriptions of Some Recent Experiments on Animals, and Deductions Therefrom.

The text is full of illustrations of the highest type, which adds much to the interest and value of the book.

We take great pleasure in recommending this beautifully bound volume to our readers.

Home Hygiene and Prevention of Disease. By Norman E. Ditman, M.D. New York: Duffield & Co. 1912.

"An ounce of prevention is worth a pound of cure," This is the proverb that comes to the reviewers mind in the examination of this book. As the subject indicates, the volume is full of most helpful suggestions, which should be studied not only by the medical profession, but by all people, and especially those living in the large cities.

This book discusses practically all of the mild or preventable diseases in a plain, simple manner that can be thoroughly understood by even school children.

We are glad of an opportunity to call our reader's attention to so complete a volume.

The book is substantially bound and contains 333 pages of reading matter.

The Tudor Shakespeare. This work will be published in forty volumes, including all of the plays and poems, under the general editorship of William Allan, Ph.D., of Harvard University, and Horace Thorndike, Ph,D., L.H.D., of Columbia University. The MacMillan Co.; Publishers, New York, will furnish copies of the entire work of forty volumes, or special volumes.

The volume that we have before us is entitled "The Tragedy of Coriolanus." It is beautifully bound, printed on a good quality of paper. with gilt edges, and the price of it is only 35c. This is a remarkably low price when the character of the work and material used is considered.

A Surgical Treatment of Locomotor Ataxia. By L. N. Dunslow, M.D., Fellow New York Academy of Medicine, Late Physician, Diseases of the Skin (out-patients), Bellevue Hospital, New York; Late Professor, Genito-Urinary Surgery and Venereal Diseases, St. Paul Medical College, Minnesota. London: Bailliere, Tindall and Cox, 8 Henrietta Street, Convent Garden. 1912.

The contents of this little volume are divided into six chapters as follows: I, A Surgical Treatment of Locomotor Ataxia; II, A New Theory as to Its Cause; III, Further Considerations and Treatment, with Cases; IV, Urethral Irritation in the Male as a Source of Disease; V, Cases Reported to the New York Academy of Medicine, October 1, 1908; VI, Cases Treated by me at the Charcot Clinic (Salpetriere), Paris, Through the Courtesy of the Late Professor Raymond.

This volume, while small, is full of very interesting and valuable information for the medical profession. It gives us great pleasure to recommend this book to our readers. It is beautifully bound, and contains 118 pages of reading matter.

Progressive Medicine. A Quarterly Diges-of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M.D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College, Philadelphia. Assisted by Leighton F. Appleman, M.D., Instructor in Therapeutics, Jefferson Medical College, Philadelphia. March 1, 1912. Fea & Febiger, Philadelphia and New York.

The contents of this volume follows: "Surgery of the Head, Neck and Thorax," by Charles H. Frazier, M.D.; "Infectious Diseases, Including Acute Rheumatism, Croupous Pneumonia, and Influenza," by John Ruhrah, M.D.; "Diseases of Children," by Floyd M. Crandall, M.D.; "Rhinology and Laryngology," by D. Braden Kyle, M.D.; "Otology," by Arthur B. Duel, M.D.

These articles are all carefully selected and will be of great value to the medical profession.

International Clinics. A Quarterly of Illustrated Clinical Lectures and Especially Prepared Original Articles, by leading members of the Medical Profession Throughout the World. Volume I. Twenty-second Series, 1912. Philadelphia and London: J. B. Lippincott Co. 1912.

The general subjects of these articles are as follows; Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynæcology, Orthopædics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Laryngology and Hygiene.

This volume, in keeping with former editions of the International Clinics, is in every way complete and up-to-date. The articles in this volume are especially fine, and will be of immense value to the medical profession.

The price of this book is $2.00.

Aldrich as Mr. Rideing Knew Him.

I can see him now, sitting at the round table at Oscar's, holding a briar pipe that was oftener between his fingers than in his mouth, and swinging it in graphic curves as he talked to us. He used it like a painter's brush or pencil.

He was dressed in a quiet suit of tweeds, the sobriety of which was relieved by a flowing crimson scarf gathered at the neck by an antique ring. He was partial to crimson in those days, and it became his complexion and the light curls apostrophized by Bayard Taylor. We parted late and in a merry mood, the young fellows among us glorying in the new friend who was so witty, so suave, and so attentive to our ambitions and aspirations. Moreover, Aldrich had just succeeded to the editorship of the Atlantic Monthly, and hopes arose of possible advantages lying for young authors in that direction.

"I'll have an elegy ready for him before breakfast, and try to get ahead of Edgar," said Frank Saltus, referring to Edgar Fawcett, as the lights went out in Oscar's and we dispersed; and on the following morning he came to me, dissembling an air of despondence.

"It's no use. Edgar's beaten us all. He shipped a carload to the Atlantic by the fast freight before daylight—as per invoice, sonnets, ten bales; triolets, ballads and rondeaux, three bales; novels and short stories, twenty tons in fifteen crates."

Some of the contributions Aldrich accepted; but not by any means the consignment. Aldrich never hesitated in rejecting what he did not want, and he took no pains to sugar-coat the pill of rejection. When he returned anything written by Edgar Saltus the latter characteristically insisted on reason. He got them and flew into a temper. An inflammatory letter from him left Aldrich undisturbed. He smiled at it but never answered it.—From Chronicle and Comment in the April Bookman.

Abstracts of the Leading articles of the month.

An Unusual Case of Intussusception.—Wood and Aberd, in The London Medical Lancet, mention the case of a girl two years old. Her illness commenced suddenly and a fortnight previous to admission. The initial symptoms were vomiting and the passage of blood and mucus per anum. Pain was said not to be a marked feature at the onset. The vomiting persisted periodically for a week, and blood was passed by the bowel for four or five days. Constipation was absolute throughout the illness, so that for a whole fortnight no faecal matter was voided. During the fortnight she apparently had frequent attacks of intestinal colic, but for the greater part of the time she lay in bed in a listless condition, until towards the end when pain became more frequent and more severe, and she then became restless. She took fluid nourishment well after the vomiting had ceased. The abdomen was noticed to swell progressively, particularly towards the end of the fortnight.

Several enemata were given, and these were either retained or returned in part without force. There was never any faecal material in the washings, but occasionally some blood and mucus.

In view of these facts the condition of the child on admission was remarkably good. She was well nourished and of good color. Her eyes were clear though rather sunken, and the mouth was drawn down at the corners. She kept up almost constantly a cry, which was more of a whine than a pain-cry, which one might have expected in the circumstances. She assumed the knee-chest position in bed and strongly resented being disturbed. The tongue was dry and clean; pulse 120 and fairly good, and temperature 99.6 degrees F. The abdomen was uniformly and considerably distended. Peristalsis was not observed. Rigidity was absent and the abdomen was free from tenderness. There was too much distention to allow of any swelling to be palpated. The rectal examination was negative.

One was struck principally with the extraordinary vitality of the child. She seemed to have considerable resisting powers to infection of the peritoneum, as this was freely exposed to infection at the second operation when the wound in the abdominal wall was purulent. The child had suffered from complete obstruction for a fortnight before coming into the surgeon's hand, she underwent two grave operations involving resection of some length of bowel within a period of five days, she had acute intestinal obstruction a few days after the second operation, and a fecal fistula, through which all the intestinal contents escaped, for three weeks. The case serves to show that a child of this age can exist with a fecal fistula for three weeks, and that any attempt at suturing the edematous bowel is hopeless. Bearing these two facts in mind, should a similar case present itself, to quote Clogg, the correct treatment would be to resect the bowel and tie a tube in each end, and later to restore the continuity. In dealing with children the way is surprising in which they will sometimes successfully fight conditions which seem to be hopeless, and the above case which I have ventured to record is a striking example of such.

Advantages and Inconveniences of Antidiphtheritic Serotherapy.—Pechere (Bull. de la Soc. royale des sci. med. et nat. de Bruxelles) has made a study of the advantages and the alleged disadvantages of the use of antidiphtheritic serum. The Dr. finds that the use of the serum has lowered the mortality of the disease from 50 per cent. to 10 or 12 per cent. and has greatly shortened the course of the disease, and made it less serious. The membrane exfoliates rapidly after injection of serum, and the complications are much less frequent and severe. Paralysis is now much less common than formerly, and the serum prevents the action of the poison on the heart which was formerly so fatal though the action of the serum is more rapid and effective if it be injected early in the disease, the late complications may be treated by its use in large doses. It has a specific action only against the Klebs-Lœffler bacillus, not acting against the complicating infections caused by the streptococcus, staphylococcus, and pneumococcus. The accidents caused by it are urticarial eruptions, albuminuria, and rise of temperature The albuminuria is transient and probably due to the entrance into the blood of a heterogeneous albumin, which is rapidly eliminated. The number and gravity of these symptoms is not such as to counterbalance the advantages which time has shown to be the result of the use of the serum. He thinks that serum symptoms are never, or very rarely, the cause of death.

Poliomyelitis.—Batten (Brain) prefers the word polioence phalomyelits. The Dr. deals with the nature of the virus, the history of past epidemics, the epidemics in Great Britain in 1908, 1909, 1910, and the distribution of the disease in London in 1904, and a bibliography. The writer says that from the evidence which has been brought forward, one is justified in regarding poliomyelitis as an infective disease occurring in epidemic form during the months of July, August and September. It tends to affect children rather than adults. It is probably communicated from person to person, or may be carried by a person who presents no sign of the disease. The resemblance of the disease to rabies suggests the possibility of some animal infection, but none has yet been found. The disease can be communicated to the monkey, and passed from monkey to monkey. The infectivity of the disease is not great, for many persons in the closest contact with the infected escape, and monkeys living in the same cage with infected monkeys fail to contract the disease. But little is known of the incidence of the disease in London. That it occurs every summer, and with greater frequency in some years than others, is known. But it is not known if it affects one district more than another. It is maintained that the disease should be notifiable whenever there is liability of its being transmitted from person to person, provided that the disease itself or its sequelæ are a serious detriment to health, or a danger to life.

That poliomyelitis is detrimental to health no one will deny. That poliomyelifis can be, and is, transmitted from patient to patient has been made evident in all the recent epidemicr investigated.

The advantages of notification are great. It will lead to the general recognition that the disease is infective, and will tend to prevent its dissemination by contact. Notification will show the prevalence of the disease, and the investigation which should follow must throw light both on the cause and means by which the disease is disseminated. The infectivity of the disease is not great and the isolation of the infected should diminish the incidence of the disease on the community, and thus prevent the effects which are so disastrous to the usefulness and happiness of many lives.

Periodic Manic Depressive Psychoses.—Benon (Revue Neurologique) says that the depression which is present in the manid-depressive psychosis is entirely different from that observed in melancholia and is really an asthenia. The mania is a hyperasthenia. The asthenia is expressed by muscular and mental feebleness. True melancholia the author belleves is characterized by the onset of a painful emotion; a secondary progressive asthenia proportionate to the moral disturbance; the development of more or less marked delirious ideas in relation to the primary emotion hallucinations and mental confusion; termination by lysis, gradual disappearance of the trouble; and the rarity of recurrence. Periodic asthenia on the other hand generally shows a sudden onset of an asthenia which is primary and fundamental, by the persistence of the asthenia in about the same degree during the course of the attack and by a mental disturbance which is due to the thoughts of the social consequences which result from the patient's astuenia.

There is a rapid termination of the attacks; and there is a periodicity. This conception of manic depressive psychosis makes it a nervous disease rather than a mental affeetion. The author has failed to recognize the distinction between a true recurrent nourasthenia or more properly speaking an anxiety neurosis and cyclothymia.

Tuberculosis of Glands, with an Internal Secretion.—Poucet (Bulletin de l' Academie de Medicine) says that the viscera most often affected by inflammatory tuberculosis are most rarely the seat of the specific lesions of tuberculosis. This is specially true of the glands with an internal secretion, and he describes conditions generally regarded as predisposing to tuberculosis as really the result of long-established tuberculosis. Morbid changes in the pituitary gland, the adrenals, the ovaries and thyroid from inflammation due to tubercle bacilli may entail far-reaching consequences and this may be responsible for the insufficiency or excessive functioning which is manifested in so many different clinical symptoms. Insufficieucy of the pancreas from a latent inflammatory tubercular process, affecting the most vulnerable parts of the gland, that is, the islands of Langerhans, explains the great prevalence of tuberculosis among diabetics, recent statistics showing that fully 43 per cent. of all diabetics die of tuberculosis. It has been assumed that the lungs were rendered particularly non-resistant by the fact of the existing diabetes; but the author is convinced that the pulmonary phthisis is merely the terminal phase; the visceral tuberculosis is of long standing, and during years it has been insidiously at work engendering the disturbances, and by them, the nutritional disorder which others assume, was merely preparing the site for tuberculosis later. Obesity, infantilism, morbid sexual phenomena, etc., are all liable to be the manifestations of loss of balance between the glands with an internal secretion or of direct injury of these glands from the effect of the unsuspected latent tuberculosis.

Gonorrheal Vulvovaginitis.—Butzke (Dtsche. med. Woch.) says that vulvovaginitis in children is nearly always due to the gonococcus, rarely to other causes such as uncleanliness, parasites, masturbation, trauma, constipation, etc. The infection in a majority of cases is carried by soiled bedding, by infected sponges or bath water, etc, The onset is rapid. During the first day at the entrance of the vagina there is an insignificant amount of discharge in which no gonococci are found. By the second day the vestibulum is red and swollen, and covered with pus in which many gonococci are to be found. The treatment during the acute stage is rest in bed, a vulvovaginal pad held in place by a T-bandage, Sitz bath, and irrigations with tannic acid solutions. Later on protargol solutions are used, followed by iodoform suppositories of 10 per cent. ichthyol tampons. In obstinate cases a urethritis is commonly present, which is treated with diuretics, mineral waters and antiseptics which are secreted through the urine. In most of these cases there are short periods of abdominal pain and fever, that are best taken care of by rest, a Priessnitz compress and a stopping of all local treatment. A cure is generally accomplished in from six to thirteen weeks; relapses are not observed by the author.

Specimen of Tuberculous Tumor of the Dura Mater in a Child, Aged 14 Months.—Cautley. The patient was the third child, born at term and weighing 10 lb ,and breast-fed. The mother had had no miscarriages. Two other children had got pertussis. On November the 7th, 1911, he was admitted to Guy's Hospital for wasting of three months' duration, but did not improve very much. At this time he was weaned. He was admitted to the Belgrave Hospital for Children on December the 27th with a history of slight cough of fourteen days' duration, and general convulsions at mid-day, with cyanosis and loss of consciousness. The temperature at 3:30 p. m. was 97° F., and examination revealed general bronchitis. At 6 p. m. fresh general convulsions occurred, perhaps a little more on the left than the right side, and the temperature rose to 101° F. Next morning the child seemed well. On examining the chest in the afternoon there were definite signs of consolidation of the left upper lobe, most marked in the first and second interspaces near the sternum. The liver was unduly large, and there was distinct evidence of rickets. The case was regarded as one of broncho-pneumonia of the left upper lobe, possibly due to pertussis, though the history of prolonged wasting and the enlarged liver were in favor of tuberculous disease. The child weighed 14 lb. 5 oz., and progressed favorably for ten days, except for loss of weight. On January the 4th he had lost 4 oz. On January the 8th he had lost a further 9 oz. In the evening he had further fits and his temperature rose to 100.6° F. Two days later he had more convulsions and died. Throughout the illness the pulse-rate was unduly high and the rhythm not at all suggestive of a tuberculous affection of the brain.

Paranephritic Abscess. Herczel, in the Wiener klin. Wochenschrift, believes that paranephritic abscesses in many instances develop from small pus collections in the renal cortex, instead of having a primary origin. In a case upon which he recently operated a diagnosis of paranephritic abscess was made from the symptoms—fever, pain in the left renal region, absence of pathological elements in the urine, no fluctuation or infiltration. After opening up the paranephric connective tissue a considerable amount of thick pus was evacuated. Subsequently the fever subsided,and the patient was discharged from the hospital in fourteen days, but two or three days later rigors and fever returned with pain in the right kidney region. An incision on this side disclosed a slight edema of the capsule, which was adherent to the cortex at one place. On incising this a small pus focus was found, which was drained with gauze. Recovery was uneventful. The unique feature of this case was the bilateral site of the small pus collections, only seven cases of this kind having been recorded in the literature. The second case was that of a married woman, thirty-one years old. The patient had suffered from an attack of abdominal pain and a stitch on the right side, after which she noticed a tumor growing in the abdomen. Her health failed and she was confined to bed. On examination at the hospital a hard, painful, irregular mass could be felt under the free border of the ribs, extending towards the renal region. A diagnosis of benign growth, connected with the kidney, was made and operation resorted to. In the renal area a hard callous mass of cicatricial tissue was found, as thick as two fingers, from the interstices of which pus could be expressed. Beneath this was a thick band of similar character. On exposure of the renal capsule four or five pus foci were detected. Prompt recovery followed evacuation of the pus. This case is of particular interest as showing how easily a paranephritic abscess can be confounded with a new-growth.

Certain Operative Procedures in the Paralysis of Children, with Special Reference to Poliomyelitis.—Jones (British Medical Journal) enumerates some fundamental principles, an observance of which is necessary for effective operations or mechanical treatment of paralysis. Paralysis may be due to destruction of the motor cells or to mechanical disability of a muscle. In acute poliomyelitis the motor cells generally suffer temporary injury rather than complete destruction. There is functional disability of a muscle if it fails to act when its governing motor cells are still living. The great cause of such disability is overstretching. If, after the acute symptoms of the disease have subsided, the weak muscles could be prevented from being overstretched, they wauld gradually regain their power as the motor cells would recover, and paralytic disabilities and deformities would be comparatively rare. But muscles may recover even after exhibiting reactions of degeneration; and if a muscle reacts to faradism it will certainly recover, though the contrary is not true.

He illustrates how overstretching occurs in certain muscles or muscle groups, and how it results in functional disability which can often be corrected by continuous fixation of the muscles in a relaxed position. Thus the first stage of treatment is the correction of existing deformity. When the deformity has been corrected the limb should be kept immovable until ligaments and muscles and bones have become of normal length and shape. The treatment must be continuous as the slightest stretching of a muscle on the point of recovery disables it again.

The age of the patient is a guide to the mode of attacking the deformities. In small children, gradual correction is preferred. A child should be at least five years of age before tendon transplantation is performed, and at least ten before arthrodesis is performed.

The methods of treatment of deformities are then discussed in the order in which they should be employed.

1. Reposition, manipulation, supports. For example, in valgus the inner side of the ankle should be raised above the outer side and maintained in this position by an iron support on outside of leg without joint at the ankle.

2. Division of contractions.

3. Removal of skin areas. For instance, in paralytic equinus a removal of redundant skin at the ankle seems to keep the foot at a right angle when the wound is healed.

4. Tendon transplantations. This should not be performed until at least twelve months have been spent in trying to regenerate the paralyzed muscle. It may be performed (a) to reinforce a weak muscle, (b) to replace an inactive muscle, (c) to change the insertion of a muscle to increase its effect without altering its office, in splitting the tendo Achilles and transferring the inner half to the outside of the heel to correct an inverted heel and foot.

Wherever possible tendon should be transplanted to bone by passing it through a tunnel in the bone. When a tendon is passed from one part of the limb to another it should pass in as straight a line as possible and fat is the best medium for it to traverse. If possible, the sheath should be taken with the tendon. During recovery the tendon must not be unduly strained. Deformity should be corrected before the tendon is transferred.

5. Arthrodesis. The ankle and mid tarsal joints are best suited for this procedure, and next to these the shoulder. The author rarely performs it on the knee. It is quite unsuitable for hip, elbow and wrists.

6. Transplantation of nerves. The author believes this to be uncertain and disappointing.

Endonasal Operation for Tumor of the Hypophysis.—Hirsch (Berliner klinische Wochenschrift) says that tumors of the hypophysis manifest themselves in three forms: (1) As acromegaly, first described by Pierre Marie in 1886, and characterized by increase in size of the hands, feet, nose, tongue, lips, and, as a rule, accompanied by disturbances in the sexual functions. Disturbances in sight may also be present. (2) As degeneratio adiposogenitalio, first described by Frohlich in 1902, consisting of increase in fatty tissue, usually accompanied by disturbances in the functions of the sexual glands and trophic disturbances, such as falling of the hair, and occasionally by disturbances of sight. (3) As disturbances of sight without any striking general phenomena, resulting at times in blindness. Headache of varying intensity may accompany all three forms, but may be entirely absent. It is interesting and important to observe that acromegaly is produced only by tumors of the anterior portion of the hypophysis, and, in fact, as Benda has shown, only by adenoma or adenocarcinoma. The degeneratio adiposogenitalio may be produced by tumor in any portion of the hypophysis, and, according to Frdheim, is not caused by the tumor itself but by pressure upon a certain center.

The diagnosis of a tumor of the hypophysis is based upon one or other of the clinical pictures described. An important aid in the diagnosis are the x-rays, as they show any changes in the conformation in the sella turcica, but the x-ray examination is not absolutely diagnostic, as this change in the sella may be brought about by other causes, as hydrocephalus, chronic circumscribed meningitis, or tumors of other portions of the brain. Headache, somnolence, and low temperature frequently occur in tumor of the hypophysis. The only treatment is surgical. Thyroidin, iodine, and hypophysin have only a temporary influence. The operative methods are divided into the intracranial and the extracranial. The first to carry out the hypophysis operation was Horsley, who adopted the intracranial method by way of the middle cerebral fossa. A second intracranial method, as first used by Krause, is by way of the anterior cerebral fossa.

Schloffer was the first in 1907 to make use of the nasal operation. This method has also been used by von Eiselberg, Hochenegg, and others. By this method there have been operated upon by various surgeons 53 cases with 21 deaths. Immediately after the first operation by the nasal route the author came to the conclusion that the method of cutting into the nasal bones did not serve any definite purpose in exposing the anterior surface of the sphenoid bone, that the complete removal of the tumor by this method was not accomplished, and that the partial removal of the tumor sufficed to favorably influence the symptoms of the disease. These considerations, together with the fact that surgeons have great difficulty in manipulations in the depth of the wound, led the author to adopt the endonasal route for operation upon hypophyseal tumors. An additional advantage of this method is that a portion of the operation can be carried out under local anesthesia. The sphenoidal sinus was opened after first removing the middle turbinate and a portion of the ethmoid was curetted away, which in turn exposed the sell turcica. This was then chiseled away and the dura exposed. On cutting through the dura the hypophyseal tumor became visible. This tumor is usually soft and can be removed through a relatively small opening. The author has operated on 12 cases, 10 of which recovered and two died. All forms of the disease were represented. The deaths in the fatal cases could not have been avoided by any other method of operation. The endonasal method is adapted to all cases in which the tumor protrudes toward the sphenoid sinus. Good results are to be expected if the tumor occupies in greater part the sella turcica or is of a cystic character. When the tumor takes an intracranial direction in its development but very little can be expected of this, as is the case with all other extracranial methods.

Angioma of the Mammary Gland.—Carl (Deutsche Zeitschrift fur Chirurgie) says that in a 22 year-old girl there was observed a mammary tumor which had been gradually increasing in size since childhood. For the past three years it was painful. No injury had been received so far as the patient knew. The tumor was located in the upper outer portion and in the depths of the left mammary gland. Upon palpation it seemed to be either a fibroadenoma or a cyst. The patient desired operation because of the pain which the condition produced. During the operation it was found that the tumor, which was about the size of a walnut, could not be shelled out. After it was removed it was found to be soft and to a slight extent fluctuating. On being cut into it was found to contain a chocolate-brown fluid. Microscopic investigation showed that the tumor was encapsulated and that the interior was composed largely of blood-vessels with some connective tissue around the larger sized vessels. These findings indicated that the tumor was a congenital hemangioma into which hemorrhage had occurred apparently because of some external influence. Although the operation was done three years ago, there has been no recurrence.

Etiology of Ovarian Dermoid Cysts and Considerations on the Contained Hairs.—Yamasaki (Monats. schr. f. Geb. u. Gyn.) says that from 1902 to 1909, 203 cases of ovarian tumors were operated on in the clinic of the university at Kumamato, Japan. Out of these there were seventy-one dermoids and 132 other tumors. Of 241 extirpated ovarian tumors 84 were dermoids, that is 34.85 per cent. This is a considerably larger proportion of dermoids than is given in any other statistics published up to date; in fact it is double most reported statistics. The age of the patients is from a few months to sixty years, the majority being between twenty and thirty years of age. Sneguireff maintains that in such cases there is an increased fruitfulness of the mother. Pfannenstiel thinks it untenable that there is any hereditary element in this species of tumor. Dr. Freund thinks that infantile uterus is often found in connection with these tumors. This condition is more frequent in the right than the left ovary. The tumor is bilateral in about 8 per cent. of cases. These tumors generally contain hair, and this may be of any color from white to black. The color of the patient's hair bears no relation to the color of that faund in the cyst. The hair of Japanese women is black, but blonde and white hairs were found in the tumors observed. The hairs are from a few millimeters to some feet in length, and they may be rolled up in snarls, single, or in bunches.

Operative Results in Cases of Intra-Cranial Tumor.

Von Eiselsberg (Wien. klin. Wochenschr., No. 1, 1912) gives the results in all his cases of operation for cerebral tumors to January, 1912. They number exactly a hundred. Forty-three operations were done for cerebral tumors; id 11 of these no tumor could be found. Twelve os the 43 survived over periods varying from a few weeks to five years, and were operated on in 4 cases for glioma, 6 for endothelioma, 1 for angioma, and 1 for secondary melanotic sarcoma. Apparently in only one of these can complete recovery be said to have taken place; the others all show varying degrees of disability. Eleven operations were done for cerebellar tuwor, and in 5 of these death followed the operation directly. In two cases of apparently successful removal of tubercular nodules death occurred within a short time from tubescular meningitis, in accordance with the general experience in such cases. In only one case—that of a cyst—has lasting benefit followed the operation, In 12 cases operation was done for tumors of the 8th nerve in the cerebellopontine angle. Four of these have survived from 1 to 2½ years, and have been much relieved by the operation, though only one is completely well and able for work. According to von Eiselsberg these cerebellopontine tumors of the 8th nerve offer decidedly the best prospect of success, as they are usually simple in nature, and every effort should be made to operate on them early, before optic atrophy has set in and destroyed the chance of restoring vision. The greatest care should be taken to avoid bruising the cerebellum, and a piecemeal removal of the tumor may even be desirable in order to spare the cerebellum.

In 11 cases in which a diagnosis of tumor of the cerebellum or 8th nerve was made no tumor was found. In one of these complete recovery followed, and has lasted for 8 years. It is noteworthy that out of 34 cases in which the cerebellum was exposed 22 died as the direct result of the operation.

In 10 cases in which a diagnosis of tumor was made but in which localizing symptoms were not present, decompression was done often with marked relief, but never with complete cure.

The record is completed with a description of the technique followed, in which there is nothing of special note.—Edinburgh Medical Journal.

The Nature and Treatment of Stenosing Tendo Vaginitis at the Styloid Process of the Radius.

In 1895 de Quervain first described the condition which he named stenosing tendo vaginitis, and which he regarded as a clinical entity. Since then three other writers —Welti, Marion, and Poulsen—have independently described the same condition, and de Quervain has met with a number of cases in addition to the eight on which he based his first communication. In a recent paper (Munch. med. Wochenschr., No. 1, 1912) he gives the results of his extended experience, which is worth noting, because the existence of the affection is not generally recognized. It is limited to the sheath enclosing the tendons of the abductor longus pollicis and extensor brevis pollicis at the lower end of the radius, and is characterized by the following symptoms: The patient suffers from pain radiating from the thumb to the wrist and forearm, and from weakness of the thumb, so that the grasping power is seriously weakened. Palpation reveals marked tenderness of the affected sheath, while the surrounding parts are free, and there is usually some thickening of the sheath to be made out. Examination of the sheath and tendons exposed by operation and histological examination of the tendon sheath removed, show merely a thickened sheath too narrow for free play of the enclosed tendons. The thickening is fibrous, and does not show any signs of old or recent inflammatory change, while the tendons appear unaffected. The affection is most commonly found in women, especially those engaged in house work, and is usually caused by overstrain. It is not a sequel of tendo vaginitis crepitans, and in distinction to that affection, it usually begins gradually and is often present for months before the patient applies for treatment. In addition, redness, œdema, infiltration of the surrounding parts, and exudation into the tendon sheath are never present. In recent cases palliative treatment, such as the application of counterirritation with rest, may be tried, but the affection is an extremely chronic and obstinate one, and in old-standing cases de Quervian favors immediate resort to operation. This is carried out under local anæsthesia, and consists in opening freely the affected tendon sheath, so that the tendons spring from it, and are no longer confined by the thickened wall of the sheath. The immediate and permanent relief which follows this simple measure is good evidence in favor of de Quervain's view that the symptoms are due to simple thickening of the sheath, preventing free play of the enclosed tendons.—Edin. Med. Jour.

Transmission of Leprosy to Animals.

Bayon seeks to answer the frequently expressed doubts as to whether leprosy can be transmitted to the lower animals by direct inoculation, by citing an extensive series of experiments from the literature. He also includes the results of his own work on the subject and concludes that: 1. Leprosy can under certain conditions be transmitted to animals, the main difficulties being the high percentage of failures and the long incubation. 2. The most suitable animals appear to be the rabbit, rat, or mouse. The resulting lesions are frequently not visible to the naked eye, and are similar to those caused by some strains of human tubercle bacilli. 3. In the rat the incubation is very long and the lesions are comparable to those seen in the spontaneous leprosy of this animal. 4. Not all leprous patients' nodules are equally infective for animals. In some cases the lepra bacilli seem to be wholly incapable of multiplying, for reasons we do not as yet know. 5. According to Stanziale's experiments the Wassermann reaction is positive in rabbits which have been successfully inoculated.—London Lancet.

Trachoma.

In suppurative and granular conjunctivitis not associated with corneal ulcerations, in acute trachoma with watery discharge and eczema of the lids, the author recommends the administration of subconjunctival injections of diphtheria antitoxin. After turning back the lids the eye is first washed with boric acid and saline solutions, and 1 c.c. of fresh antitoxin then injected in each lid, proceeding from within outward. The lids are then returned to the normal position, and with the eye closed a third c.c. is injected under the skin and muscle-tissue of the upper lid. The injections are followed by pain, acute edema resulting in closure of the eye, and an erysipelatoid eruption which overspreads the cheek and forehead. In thirty six hours the inflammatory reaction disappears, lachrymation ceases, and the granules become attenuated or disappear. Three or four such treatments are given. Of 50 patients who received the injections 30 were practically cured and the others notably improved; in the latter the additional use of copper sulphate and mercury bichloride led to complete recovery.—Pachopos, La Grece medicale.

Lumbar Puncture in Typhoid Fever.

In a case of typhoid fever accompanied with intense and persistent headache, the authors practiced lumbar puncture. The first puncture confirmed the diagnosis of meningeal hypertension, but had no effect on the headache. A second, however, besides showing the presence of persisting, though lessened, hypertension, brought immediate and lasting relief. The authors are of the opinion that meningeal hypertension may be present in various acute infections without producing a definite group of symptoms pointing to the meninges, and urge, in view of the readiness with which lumbar puncture is now performed after a little practice, and its harmlessness, that this measure be availed of in infections when there are present evidences of meningeal hypertension, particularly violent and persisting headache, even when they occur as isolated symptoms, as in the case reported. —Oddo and Monges, Marseille medical; Bulletin medical.

Chronic Mediastinitis Inferior in Children.

Hutinel states that in a case of circulatory disturbance involving the vena cava, one should study the heart of the patient, make use of radiography, and notice whether the apex of the heart retracts with the systole or remains motionless. In case of immobility one should search for a mediastinitis inferior. In the latter there are various gradations from slight adhesions to adhesions so dense and so extended that heart, lungs, and liver are all involved and rendered inactive. These cases are generally due to tuberculosis, syphilis, or a combination of both. They may begin with a pericarditis, followed by a pleurisy, or the pleurisy may be the first factor. When the formation of fibrous tissue extends downward into the abdomen the liver is involved and the portal circulation is interfered with. Inferior mediastinitis is more frequent and more interesting than the superior variety. In the most marked forms there is a voluminous mass of connective tissue involving the thoracic and also the abdominal organs, including the stomach, liver, and spleen. Mediastinitis may begin with inflammation of the glands, pleurisy, or pericarditis. It comes on insidiously; the symptoms are dyspnea, circulatory disturbances, cyanosis of the lips, coldness of the extremities from compression of the abdominal aorta, edema of the legs, tachycardia, and finally asystole. The urine is small in amount, highly colored, rich in uric acid, and urobilin and contains a variable quantity of albumin or sugar, showing involvement of the pancreas. The veins of the abdomen are enlarged and there are ascites, hemorrhages from the nose and intestines, and purpura. Auscultation shows tachycardial, fetal rhythm, gallop rhythm, etc., in pronounced cases. There is an undulation of the chest walls with every beat. The lungs are congested and there arc pleural adhesions. Radioscopy shows the heart increased in size and surrounded by an obscure band of connective tissue. The treatment of these cases is not simply symptomatic, but should include the treatment of the underlying disease, tuberculosis or syphilis.—Le Bulletin Medical.

Glucose in Diabetes.

Observations made by G. Klemperer show that severe diabetics who secrete large amounts of sugar on a mixed diet, and whose urine will not become free from sugar on a meat diet, will yet tolerate relatively la-ge amounts of pure glucose, if given after the withdrawal of meat and without meat. The assimilation of glucose is often slight after two or three days of mixed diet, but is often excellent after a longer period of vegetable diet, yet in some cases a short period of starvation must precede the administration of sugar. In a certain percentage of cases the assimilation of sugar will remain poor despite the withdrawal of meat and starvation, but these cases need not necessarily be more severe than the positive cases. The good effects of the administration of glucose are evident in the disappearance of acetone and diacetic acid. In some cases the substitution of bread for glucose had the same effect. It may be regarded as proved that the breaking-up of the sugar molecule is rendered more difficult in severe diabetes by meat and is less interfered with by vegetable proteid and during starvation. It is probable that the glucose is broken up by intestinal bacteria and that the decomposition products can be burnt up quite readily by the diabetic organism. The presence of meat in the intestinal tract will introduce a different group of bacteria, which interfere with the proper decomposition of the sugar molecule. In the treatment of diabetes with acidosis, it seems to matter very little what kind of carbohydrate is given, provided very little proteid is added and a period of meat-free diet has gone before.—Therap. d. Gegenwart.

The Treatment of Tuberculosis of the Kidney.

At the last meeting of the German Urological Society an interesting discussion took place on the treatment of renal tuberculosis which resolved itself into a comparison of the relative merits of conservative and operative methods(Zeitschr. f. Urologie, 1912, vol. i.).

At the sitting where tuberculin treatment was specially discussed the following conclusions were formulated by Bachrach, who introduced the subject: 1. Operable cases of renal tuberculosis are not suitable for tuberculin treatment. 2. Early cases where bacilli are found, without marked suppuration or interference with kidney function, may be treated with tuberculin till a definite indication for nephrectomy arises. 3. After nephrectomy tuberculin treatment is advisable if tubercle is present in the genital tract or elsewhere. 4. Tuberculin treatment results in improvement of the general health. 6. Definite cure of local deposits has so far not been proved. 6. Tuberculin treatment must be carried out so as to produce no reaction. 7. Inoperable cases of renal tubercle are not appreciably influenced by tuberculin, although the treatment may be tried in the absence of any other therapeutic measure likely to be of assistance.

Other speakers agreed substantially with these conclusions, in particular that tuberculin treatment was not to be regarded as a substitute for the operative treatment of renal tuberculosis.

In the discussion on the results of nephrectomy for tubercular kidney, Wildbolz emphasized the difficulty of arriving at definite conclusions with regard to the results of conservative treatment owing to the very inconclusive nature of the reports available for study, and stated that genuine cases of permanent recovery in which the urine has become healthy and both kidneys have been found to functionate normally are not to be found in the literature. He maintained that numerous reported cures after tuberculin treatment had all been reported too early to allow of a final verdict being arrived at.

In order to arrive at a definite finding he obtained information from a large number of medical men, which yielded 316 cases bacteriologically examined and proved to be tubercular. 218 of these, i.e. 70 per cent., had succumbed to the disease within 5 years of its onset. Only 30 of the 98 surviving cases were free from marked symptoms, and in this connection he pointed out as a noteworthy feature that among the fatal cases a number had shown apparent cure for months or years till the disease reappeared and proved fatal. In addition to these 316 cases, all treated by conservative measures, Wildbolz carefully investigated his own records and those of a colleague which showed very similar results. His investigations led him to summarize as follows: Under conservative treatment the majority of cases die within 5 years. Rather more than 20 per cent. of cases survive more than 5 to 10 years, a few even longer. In a small minority of cases the symptoms practically disappear, so that the patients might be regarded as cured did not a thorough examination of the urine and the eventual reappearance of symptoms prove the contrary. An apparently genuine lasting cure has only been noted in isolated cases out of thousands reported, and these are too few to invalidate the statement that tuberculosis of the kidney is not curable, as a rule, by conservative measures in use at the present time.

On the other hand, the results of operative treatment show a high percentage of cures. Israel, speaking from a study of 1023 cases, claimed 75 per cent. of cures. 12.9 per cent. of the deaths took place within 6 months, the remainder mostly within 2 years after operation. His mortality was higher in males than in females. The chief cause of the deaths occurring soon after operation was miliary tuberculosis; of the later deaths, phthisis and disease in the remaining kidney.

Wildbolz's own material showed 60.8 per cent. of cures, and in general it appeared from the results reported by a number of observers that well over 50 per cent. of cures are obtained by operative treatment.

As regards proof of cure, it may be noted that Israel, Casper, and others regard the results of inoculation tests as the only reliable means of proving the absence of tubercle bacilli from the urine, for bacilli may be found in urine which on ordinary examination appears healthy and free from albumin.—Edinburgh Medical Journal.

Bacteriological Examinations of the Blood in Puerperal Fever.—Semon (Monatschr. f. Geb. u. Gyn.) mentions the results of the examination of the blood in eighty-six cases of fever after labor. There may be two reasons for the absence of germs in the blood; either the number of germs is so small that very few reach the blood, the majority of them being fixed in other internal organs; or the blood has destroyed the germs through its contained antibodies. The nature and the number of germs are of importance in the prognosis of these cases. A third factor is the power of resistance of the organism. In eighty-six cases of women who had fever after labor, whose blood was examined for bacteria, germs were found in twelve cases. In the cases selected fever began within twenty-four hours of labor. Of the twelve positive cases six died. Four showed streptococci and two staphylococci in the blood. One followed a septic abortion, with endometritis and peritonitis, dying on the seventh day. The lochia contained hemolytic staphylococci, and once a few were found in the blood. The autopsy established the diagnosis. The other died of pyemia on the forty-eighth day after delivery of a face presentation by version. In the lochia were hemolytic streptococci; the blood contained staphylococci in small numbers on the sixteenth and seventeenth days. The other fatal cases had streptococci in the blood. Three cases were delivered by operations, two with contracted pelvis. One of these showed hemolytic streptococci in the vaginal secretion. The second came to the clinic with membranes ruptured two days previously and hemolytic streptococci were found in both lochia and blood. The third, with contracted pelvis, rupture of the uterus, and abdominal extirpation, died. Hemolytic streptococci were found in the secretions and in the blood postpartum. The fourth, delivered normally, but with manual extraction of the placenta, had fever on the fifth day. On the eleventh day hemolytic streptococci were found in the blood. The cases that recovered were two of staphylococcic and four of streptococcic infection. One was a spontaneous abortion, with bacteria in the blood on the second day. The germs are thus seen to be driven into the blood by normal contractions, as well as by operative procedures. The second occurred after a severe high-forceps delivery. Of the four recovered streptococcic cases, three were abortions, one at full term. Of the seventy-four cases which showed no bacteria in the blood, four died; several had peritonitis, and others severe infections.

Splenomegaly of Inherited Syphilis in Children.—Weber (Proc. Roy. Soc. Med.) says that moderate splenomegaly in children of about 5 to 16 years may be almost the only evidence of an inherited syphilitic taint, but, in such cases, Wassermann's sero-reaction for syphilis (if available) would doubtless generally give a positive result. Other evidence of inherited syphilis is occasionally forthcoming. The splenomegaly of inherited syphilis is often accompanied by occasional, usually only slight, attacks of obstructive jaundice and by excess of urobilin and urobilinogen in the urine. Hepatic cirrhosis, with or without ascites, may be associated with the splenomegaly, and at the time of death the hepatic cirrhosis in such cases is probably usually of the ordinary multilobular ("hobnail") type. Though it seems doubtful that the cirrhosis of the liver in these cases is of specific syphilitic origin, it is quite possible that the presence of an inherited syphilitic taint may diminish the resistance of the liver toward the action of toxins, including alcohol, and render it specially liable to cirrhosis. The inherited syphilis in these cases may be, but often is not, associated with some degree of "infantilism"—i.e., more or less retardation in general physical development, and especially in the sexual functions. In these cases great caution must be employed with regard to antisyphilitic, especially mercurial, treatment, probably on account of the general delicacy of the patients and their liability to renal and catarrhal complications. Iodid of iron seems to be useful. In these cases there is generally very little real anemia, even when the general appearance of the patient is cachectic; and anemia, if present, is often only temporary. In some cases there may be a certain amount of polycythemia, probably of reactive nature, sometimes sufficient to constitute a symptom-complex, which might be termed "splenomegalic polycythemia of inherited syphilis in children." Other unknown (toxemic?) conditions may cause splenomegaly and recurrent jaundice in children, similar to that met with in cases of inherited syphilis. "Abdominal crises," pain, etc., of uncertain explanation, may occur occasionally both in the inherited syphilitic and in the other cases. Some cases of "familial" splenomegaly occurring in two or more brothers or sisters may be dependent upon inherited syphilis, but familial splenomegaly in children after infancy is better recognized in connection with chronic acholuric or so-called hemolytic jaundice and with primary splenomegaly of the Gaucher type. Splenomegaly in children may be the most important sign of the presence of hepatic cirrhosis, when the former is either secondary to, or due to the same cause as, the latter. Some cases of splenomegaly in children with inherited syphilis probably ultimately present the characteristic clinical features of splenic anemia or Banti's disease.

Morbilliform Rash in a Child.—Allan in The Biritish Journal of Children's Diseases says that transient rashes in children are by no means uncommon, and the causation of such often cannot be definitely decided. The following case is one in which a rash similar to that met with in measles developed, the causative factor in which was decidedly obscure. A girl, aged 13 years, had for many years been under treatment for kerato-iritis of the right eye, but this condition had now become quiescent. There was also internal strabismus of that eye, and it was desired that the eye should, if possible, be straightened. Under an anaesthetic (chloroform and ether) tenotomy of the right internal rectus was done. Two days afterwards a rash developed, which is accurately described as morbilliform. It was a perfectly typical measles rash except that the face was unaffected. The child felt rather out of sorts and was inclined to be sick, though she did not actually vomit. Other symptoms were entirely negative—no headache, no temperature, no sore throat, no coryza, no watering of the eyes, etc. The rash disappeared within forty-eight hours and there was no subsequent desquamation.

What was the cause of the rash? Among the possible aetiological factors may be mentioned measles, German measles, food, drugs, and the anaesthetic.

With regard to its being due to one of the exanthemata, I think that most improbable. No doubt many anomalous forms of measles and German measles do occur, but the entire absence of accompanying symptoms seems a strong point against its being either of these. Again, several unprotected children (i.e. children who had not previously had measles or German measles) came in contact with the patient and did not develop either of these diseases. There was no history of recent exposure to infection. The child had previously suffered from measles, so that this disease might almost certainly be excluded, seeing that a second attack of measles is not common. The fact that the face escaped is strong presumptive evidence against its being either of these diseases. After taking into consideration all the points mentioned one may, I think, justly exclude these two exanthemata.

As to a dietetic factor, that is also not a probable explanation. The child was having good plain food, and she had eaten nothing likely to produce a rash.

A post-anaesthetic rash is an occasional occurrence. I have several times seen such develop, but I have not seen one which simulated the rash of measles. All that have come under my notice were scarlatiniform in character, and were in evidence immediately after or within a few hours of the exhibition of the anaesthetic. Now the rash in the case in question did not show itself for two days—a fact which practically vetoes this theory of the causation. Another fact of importance which affords further support against this being the causative factor is that on three other occasions I had given this child an anaesthetic without any subsequent appearance of a rash.

As to drugs, the child was not having medicine internally. She of course had the usual preparatory treatment before the administration of the anaesthetic, and in this case the intestines were acted on by calomel (gr. ij) followed by a saline purgative. We sometimes do meet with cases in which the administration of a cathartic drug produces a rash, often morbilliform in character. But the rash did not develop until three days after the drugs had been taken, and moreover the child experienced this same preparatory treatment at three different times without any result of this nature. Both these points militate strongly against our accepting this cause for the rash. The lower bowel was not cleared out with an enema, so that factor may be dismissed at once. The only other drug that might have been indirectly absorbed into the system was boric acid. After the operation the eye was bathed with boracic lotion (10 gr. to the oz.) every two or three hours during the day, and the question is, could enough be absorbed to produce toxic symptoms in the form of a rash? This explanation may seem a little far-fetched, but it appears to me to be the most feasible of all. During the course of lavage of the ordinary healthy eye there would doubtless be some absorption (infinitesimal in amount) of any drug in solution applied. For a short time after an operation such as tenotomy of an internal rectus there would undoubtedly be greater opportunities for any drug being absorbed, but even in such a case the quantity absorbed could not be large. Here a solution (10 gr. to the oz.) was employed, and probably not more than four ounces were used at each dressing. Of that amount only a very small quantity could have been taken into the system, so that one would really have to assume a marked idiosyncrasy on the part of the patient The boric lotion was not stopped, but it is a significant fact that the disappearance of the rash coincided with the reduction of the eye washings to thrice daily.

Lordosis and Albuminuria in Childhood.—M. Pincherie (Riv. di Clin. Pediat.) has made extensive clinical and experimental observations on this subject. He finds that lordosis is an important factor in the albuminuria of children. Spontaneous lordosis, temporary or permanent, of the upper segment of the lumbar spine, only causes albuminuria exceptionally; there is no relation between the degree of spontaneous lordosis and the elimination of albumin. In some subjects with typical and marked lumbar lordosis it was not possible to determine the albuminuria even by artificially exaggerating the lordosis Artificially produced lordosis of moderate degree causes, on the other hand, in the majority of instances, a renal reaction both in the vertical and horizontal position. This reaction varies, according to the subject; is least in normal individuals and most in infants predisposed to it by nephritis, recent infective disease, and tuberculosis. The renal reaction to lordosis is characterized by oliguria, albuminuria, and the appearance of renal elements in the sediment, and is directly dependent on the mechanical injury, the general condition of the subject, and the local condition of the kidney. The traumatism of artificial lordosis tends to reproduce the picture of the affection which has been going on in the ordinary system and to bring into prominence its lessened resistance. Hence artificial lordosis may have some diagnostic and prognostic importance in the direction of confirming renal debility. In orthostatic albuminuria of typical course, artificial lordosis produced in the author's cases a marked reaction, with momentary change in the classic type of the albuminuria and with the appearance of various renal elements in the urinary sediment. In certain subjects with serious anaemia, cardiac disease and diphtheria, the reaction to artificial lordosis assumes special characteristics. In a word, lumbar lordosis is an efficient mechanical factor in the genesis of some forms of albuminuria. It does not, however, act as a rule alone, nor in a purely physical manner, but requires to be associated with another important cause, viz., the lessened resistance of the urinary apparatus. In his experiment on animals, the author found that artificial lordosis caused physico-mechanical changes, which induced special modifications in the renal circulation and consequent albuminuria.—British Journal of Children's Diseases.

Infantilism Associated with Chronic Interstitial Nephritis.—Parsons (The British Medical Journal) says that the purpose of this communication is to direct attention to a class of cases which has apparently escaped general recognition, namely, the association of the group of symptoms which we regard as constituting infantilism with cirrhosis of the kidneys. As far as I can find in the literature there has only been one case described. This was a child shown by Fletcher at the Children's Section of the Royal Society of Medicine, in March of this year under the title "Case of Infantilism Associated with Polyuria and Chronic Renal Diseases.

Such, then, are the clinical features—polyuria, pale urine with a trace of albumen marked thirst, wasting and infantilism, which post mortem are found to be associated with a chronic interstitial nephritis, probably congenital, and a hypertrophied left ventricle.

Cirrhosis of the kidneys is an extremely rare disease of childhood. Dr. J. E. H. Sawyer up to the end of 1906 was only able to collect 55 cases. It has been admitted by most writers that the disease may be congenital in origin, and that the chief factor in its causation may be syphilis.

Since syphilitic infantilism is such a well recognized condition it might be urged that syphilis was the causative factor of the infantilism and the renal disease in the case I have described. However, there was no evidence of that disease to be found in the other organs post mortem: neither the clinical findings nor the parental histories supported such a suggestion. In an analysis of 22 cases Sawyer notes that "under-development" occurred in 45.4 per cent. He does not in every case state the mental condition. In his descriptions of his cases he writes: "Small for his age;" "had always been very small for her age and was a dull-looking child;" "was pooly developed and small for her age;" In some of these there was no evidence of syphilis. In the case already quoted of Fletcher the Wassermann reaction was negative. So that I think it will be granted that this "under development" of the body and frequently also of the mind—or, as I prefer to call it, infantilism—does occur in association with chronic interstitial nephritis, and that apart from syphilis. Guthrie states that his cases were "stunted, undersized and wizened," but that they were "shrewed, precocious and intelligent beyond their years." It would be interesting to have the later histories of these cases, for I think it is extremely likely that when they reached what should have been the period of puberty, some showed signs of childishness.

Speculation concerning the mode of production of this condition of infantilism is rather fascinating. We know that infantilism occurs is association with some of the chronic disorders of early childhood—for instance, severe and prolonged diarrhea tuberculosis and pancreatic insufficiency. It is also found in the absence or perversion of certain internal secretions, as in cases of cretinism and juvenile myxoedema, and in some cases of ateleriosis associated with tumor of the pituitary body. Lastly, there are certain types in which no definite etiological factor can be assigned—for example other cases of ateleiosis and infantilism of the Lorain type. Bradford's researches have shown that the kidneys have a profound effect in general metabolism.

As the result of these observations I have failed to discover that there is any difference between the salt exchange in cases suffering from this variety of edema and that which takes place in perfectly normal children. I do not think that the theory of salt retention wholly explains the condition any more than it does in all cases of edema in Bright's disease.

Deprived of the theory of salt retention, and in the absence of clinical or pathological evidence of heart and kidney disease, we are driven to the tissues themselves for an explanation of the condition. I feel that the number of cases which I had the opportunity to examine pathologically do not justify the drawing of any definite conclusion from the presence of fibrosis of fibrosis in the suprarenal glands, which was so obvious in the two cases examined.

Syphilis in Tibet.—MacGregor (Indian Med. Gazette), Says the commonest disease in Tibet is undoubtedly syphilis. Venereal disease as a whole is very prevalent, but gonorrhoes and soft sore are comparatively uncommon. From January 1st, till Aug. 31st, 1911, 439 persons attended the Civil Hospital here: of these 144 were suffering from veneral disease, giving a percentage of 33. A great many of the cases of syphilis are of a severe nature, largely because the people put off coming to hospital till the disease has taken a firm hold, and also also because some of them go for treatment to Lamas. It is only when the latter have experimented and failed that the hospital is resorted to. It is a curious fact that the stress of the disease seems laagely to fall on the bones and joints. The following cases illustrate this;—

(1) S. Ch. M.—Admitted on August 19th, 1911, complaining of inability to bend his right elbow. He had been attending hospital last December and January for syphilis, but had left before he had derived much benefit under chloroform; adhesions in the elbow joint were broken down and the patient has now very good movement in that joint.

(2) C. Ch. M.—A similar case to the above. Patient had never been under treatment for syphilis. He was quite unable to bend his elbow and it was evident that very dense adhesions had formed. The patient is still under treatment.

(3) P. T. F.—Admitted late one night complaining of great pain over the heart and swelling of the right arm. Under palliative treatment she passed a fairly good night: next day on examination she proved to be a well-marked case of syphilis. The swelling subsided in a few days and she has now greatly improved, though transient swellings occurred in the elbow and right knee joints.

Difficulties in tretment.— Apart from the fact that those suffering from syphilis tend to put off coming to hospital till very late, there is one disease prevalent in Gynatse which has a very important bearing on treatment. That is scurvy. It is the exception to have a patient in hospital whose gums are spongy; many too suffer from haemorrhages chiefly from the nose.

At first all cases of syphilis here were treated by mercurial inunction, but it was found that almost immediately the patient's mouths got into a very bad condition for the reason mentioned above. Much more satisfactory results have been given by the intramuscular injection of ten minims of of mercurial cream.

The weekly interval which elapses between each injection is utilized in getting the mouth into as clean a condition as possible.

The author has had the opportunity of giving "Salvarsan" to two patients; both doses were given intramuscularly and the results have been extraordinarily good.

1. D. T. T. M.—Admitted on 23rd Aug. 1911 suffering from a very large ulcer completely surrounding the penis; there was also a deep ulcer below and to the right of the umbilicus. He suffered from sores in the mouth and there was a pustular rash on the backs of the thighs. Salvarsan was administered a week after admission, 6 grm. being injected into the muscles of the buttock. The patient experienced very little discomfort after the injection. The sores at once began to heal and the rash vanished. So well has the patient progressed that probably a second dose will not be given.

2. P. C. T. F.—Admitted on 20th July 1911, suffering from syphilis. It was one of the worst cases the author has ever seen. There were sores in her mouth and on her vulva; she had a very foul vaginal discharge. There were large ulcers on her forehead, front of her neck, inner side of right arm and round the knees. In addi

tion to this she was 7½ months pregnant.

The first injection ('6 gram.) was given on 23rd July 1911. There was very little after-effect and patient left hospital a few days later, saying she felt much better. On 10th August she returned for her second injection. This caused entreme collapse, her pulse becoming very weak and temperature rising to 100'6 F. Next day she was much better, the only complaint being some stiffness in the leg and thigh. All the sores on face, neck and legs cleared up as if by magic and the patient left hospital twenty days after this injection practically cured.

It will be very interesting to see the child of this patient.

Compressed Air Ilness.—Hill, (British Medical Journal) analyzes the various observations on this subject which he has made upon animals, upon himself, and his associates. He finds that mere pressure has no effects upon the circulation until many more atmosphereas are reached than can be survived, owing to the fact that oxygen becomes toxic to man at a comparatively low pressure. Animals can be subjected to several hundred atmospheres of pressure without harm. But life is destroyed by very high pressure of water through destruction of the chemical structure of the protoplasm. Through all this pressure there is no mechanical effect upon the circulation. The author and his assistants have been subjected to six and seven atmospheres of air pressure in a chamber fitted for taking absevations and communications with the outside, and suffered no harm or discomfort. The oppression of which divers couplains is not due to the higer percentage of carbonic acid, but to au increase in its partial pressure which controls breathing. To obviate this discomfort, then, by keeping the partial pressure down, the air must be sent through the diving hemlet in the same volume regardless of pressure, and this means the volume must increase with the increase of pressure. Compressed air disease is caused, as is well known now, by the liberation of the dissolved nitrogen gas from the blood into vital structures. This occurs only when the decompression in the last stage progresses too rapidly. Hill suggests the breathing of oxygen for some minutes before the lsst lock is entered, thereby causing a vacuum for nitrogen and its more rapid excretion through the lungs. An excess of carbon dioxide is of advantage, also exercise, for both increase the respiratory exchange. If these, and some other precautions which he suggests, are observed there should be no danger from the exposure to the high pressures of caissons.

Retroversion, Retroilexion, and the Gravid Uterus.—Jacobs (Prog. med.) says that in such cases the practitioner should use every measure to reduce the incarceration, before operating, and these endeavors may consume several days. The diagnosis is assisted by making pressure at the posterior wall of the vaginal junction with the uterus where the retrodisplaced fundus is felt. If such pressure causes a flow of urine, incarceration has taken place. By crowding backward and upward the uterus it indirectly lessens the pressure on the neck of the bladder. When the pregnancy is of but a few weeks standing reduction is comparatively easy, and the use of a Hodge pessary will keep the uterus in place. If the uterus is large, soft, and fills the pelvis, the best result is obtained by placing two fingers in the vagina and trying to reach the promontory, at the same time crowding the fundus upward. The uterus is raised and at the same time made to roll forward by the pressure of the fingers. Success will be shown by a sudden yielding and slipping upward of the fundus. If these maneuvers are not successful, chloroform is given to produce relaxation and another attempt to reduce the uterus is made. The knee-elbow position may assist so that anesthesia will not be necessary. If the retention of urine persists, and edema of the vulva and lower pelvis comes on, with absolute constipation, the surgeon must interfere by laparotomy. In these cases it is the promontory that resists the rise of the uterus, which was situated low down at the time of conception and developed below it. Lesions of the adnexa, situated forward, such as ovarian cyst, may complicate the condition. The most serious condition that may be found is adhesion of the fundus due to past parametritis, pelvi-peritonitis, or annexitis. If these adhesions do not soften, the uterus remains bound down in the pelvis. These adhesions may be ruptured, and the necessary manipulations do not often produce abortions.

Dull and Backward Children.—Tredgold (Med. Press, London) finds that backward school children are divisible into two main groups, namely, those of (1) innate dullness, and (2) acquired dullness. The innately dull are usually sturdy, well grown, and in good physical health; but they have no capacity for book learning, and the teacher finds the greatest difficulty in teaching them the most elementary abstract rules. Two things are essential for the proper education of this class. First, a modification of the school curriculum to suit their natural aptitudes, and second, more individual instruction. Those children whose backwardness is not the result of innate dullness, but of defective cerebral nutrition caused by an adverse environment, divide into three classes: those children who are backward through defective function or lack of opportunity; those whose backwardness arises from some partial blocking of the sensory avenues, such as defective vision or hearing, and it disappears upon removal of the cause; and those children whose mental development has been hindered by malnutrition or disease. In one respect medical inspection, as at present conducted, is distinctly disappointing. The prime concern of the educationalist after all is with mind. This being so, it seems matter for great regret that, while so much attention is being given to bodily conditions, so little attention is bestowed upon the condition and capacity of the mind. It is the exception to find any reference to the number and condition of the dull and backward children, or to the matter of intelligence, at all. Until the school medical officer concerns himself much more with mental conditions than he does at present, and until the physician and the pedagogue work together at this matter hand in hand, we shall never get the best results either from medical inspection or from education.

Fatal Jaundice of the New-Born.—Morris (Australian Med. Jour.) mentions the occurrence of one mild and temporary and five fatal cases of jaundice among the ten children of one woman. The autopsy of the last case showed no obstruction of the bile ducts but evidences of chronic inflammation of the lungs, liver and kidneys. The literature contains records of eight similar families. In these nine families there were seventy children, with fifty-nine cases of jaundice of whom forty-eight died. A study of the various histories brings out the following features: The parents were apparently perfectly healthy, and in no case was there any reason to suspect syphilis. Several writers emphasize the absence of a syphilitic history in the parents. The infants affected are in appearance and development apparently perfectly normal at birth. The jaundice is absent at birth, but sets in generally within twenty-four hours. The stools remain normal in appearance and are never pale, and the urine is never dark. The indications that the jaundice is of a grave nature are the onset of gastrointestinal symptoms, e.g., loss of appetite, and vomiting, crying and moaning, more or less incessantly, with deepening coma. The first-born frequently escapes and healthy children may grow up in between the affected ones. The toxic agent, whatever its nature, seems to become more intense as the parents grow older, as evidenced by the shorter life of the latest-born infants. This is contrary to the usual course of events in syphilis; but the writer believes that the present case is either syphilitic in origin, or that syphilis has been grafted on to some other toxin, maternal in origin, but the nature of which is unknown.

Cause of Rupture of the Gravid Tube. Kiutsi (Arch. f. Gyn.) says that acute tubal rupture is due to compression of the villous tufts, accompanied by apoplexy, ischemia, destruction of the coverings of the ovum, hemorrhage into the sac, dilated veins, hematoma, and hemorrhagic infiltration of the edematous connective tissue. The primary cause of the pressure he finds to be a plugging of the large intervillous veins which carry the blood to the villi. The supplying arteries bring this blood with considerable force and this force ruptures the plugged veins in which there is no outlet for the blood. Later the coverings of the ovum also rupture. Collateral circulation does not lessen the pressure. The rupture in sudden cases does not show a smooth opening as in slow cases, but an irregular rent. The strongest compression is seen in the periphery of the tufts. Intrascapular rupture occurs from bleeding into the connective tissue. First comes pressure, from sudden bleeding, killing the ovum. This results primarily from increased arterial pressure, secondarily from the rapidity of the blood stream. The death of the ovum comes from lack of nutrition due to obstruction of the chorionic circulation; it is a secondary result of the intervillous pressure. As the determining causal factor of the rupture of the chorionic villous vessels he sees the weakness of the chorionic villi, which have a loose structure with large, dilated veins and large intervillous spaces, and this is due to the abnormal implantation of the ovum. Contributing factors may be contraction or torsion of the tube, and influences from without such as jumping, lifting, or coitus. Rupture of the tube results from increased venous pressure in the intervillous spaces. and this from pressure on the veins supplying the villi.

The Teaching of Eugenics in Schools and Colleges.—Leslie, in the Journ. Roy. Instit. of Public Health, is in favor of eugenic teaching for boys and girls, who would then be much less likely to grow up with false or perverted ideas of sex matters. The Dr. discusses the four following questions: (1) Should there be preliminary teaching at home? (2) When (at what age) should sex and eugenic teaching be given in schools? (3) What form should such instruction take? (4) How should such instruction be given? The Dr. gives the following general principles for guidance in regard to the teaching of eugenics: (1) All teaching must be authoritative and given by qualified instructors of the same sex. Vague amateurish teaching is not only useless, but may be positively dangerous. (2) Teaching should be given on a basis of perfect frankness. (3) The subject should be treated as both a serious and sacred matter. (4) Nature study of plant and animal life is the best introduction to the subject, followed by studies in physiology and personal hygiene. (5) The teaching is best given in small classes, supplemented by incidental and confidential talks with individual pupils as occasion arises. Confidence between teacher and pupil is to be encouraged in every way possible. (6) The teaching should as far as possible have due regard to the age, temperament, and home environment of the pupil. (7) The personality of the teacher is every whit as important as his or her technical knowledge of the subject. (8) There should be encouragement of intellectual, emotional and social interests outside school work. This may be partly achieved by fostering a taste for the best in literature, art, music or science. (9) In Great Britain there is a widespread conviction among both men and women teachers of the paramount influence of religion, and of scripture lessons, which have the power to inspire a high moral ideal and to touch the spring of conduct. (10) Coeducation in this country, though still on its trial, is regarded by not a few as the solution of the problem, and the best means of developing all that is most valuable from the eugenic standpoint.

Hypertrophied Papillae of Morgagni Causing Rectal Symptoms.—Magarey (British Medical Journal) says that the papillæ of Morgagni are small, white, glistening projections, pyramidal or triangular, with the apices directed upward and inward toward the lumen of the gut, varying in number from one to six and situated either at the upper extremities of the columns of Morgagni or on the edges of the valves intervening between the upper ends of these columns, their length varying from one-eighth inch to one-third inch. They consist of myelinated and non-myelinated nerve fibers, with a considerable number of ganglion cells and very little connective tissue. They are covered by a stratified epithelium. When hypertrophied, the papillæ much resemble in shape and size the writing end of an ordinary lead pencil. They must be distinguished from the small fibrous polyp that sometimes forms on the top of an internal hemorrhoid. They are regarded as accessory sense organs aiding and warning the anal sphincter. They are absent in the majority of patients. If hypertrophied they greatly augment pruritus—indeed, may be its sole cause, since this symptom is immediately relieved or cured by cauterization or removal. They cause pain, which may be located in the lower part of the back, or may be paroxysmally intense when the bowels are moved, passing off immediately thereafter. These symptoms are entirely relieved by cauterization. In some cases they cause a sensation of a mass in the rectum.

Cauterization is usually preceded by insufflation of an analgesic powder. A Kelly speculum is introduced into the rectum, and then withdrawn until the papillæ stand up at the inner end, when they can be successively touched with the electric thermocautery. One application is generally sufficient.

Vaginal Cesarean Section in Eclampsia.—Goldberg (Zent. f. Gyn.) believes that there is no doubt that the cause of eclampsia is a poison which exerts its baleful effect on the organism some time before the convulsions occur, causing increased blood pressure, contraction of the vessels, changes in the brain, in the lungs, kidneys, and liver. Edema, headache, nausea, pain in the stomach, disturbances of sight, lessened kidney secretion, and albuminuria are all observed before any convulsions appear. It is only when the cerebral disturbances have reached a certain height that the clonic-tonic spasms occur. If the cause of the disturbances is not quickly eliminated death will ensue. In many cases the convulsicn causes contractions of the uterus, and in some cases a rapid delivery occurs. If this takes place early enough the patient recovers, but if delivery has waited too long the patient goes on to coma and death or inflammation of the lungs. The contractions may cause new convulsions, and the efforts at expulsion take on a stormy character. The safety of the patient lies in delivery accomplished as rapidly as possible. The earlier delivery occurs the better is the prognosis. As to the best method of accomplishing speedy delivery, the author thinks that the vaginal Cesarean section is superior to Bossi's dilator with incisions, which are liable to cause tearing of the uterus into the peritoneal cavity. The vaginal section is less dangerous to the mother, and delivery is easy and safe for the child. This operation can be done in a private house with good assistants. The author gives histories of three cases delivered by this method, two of them resulting in recovery of the mother.

The other patient was delivered after being in labor for some time. The eclamptic symptoms began a week before delivery; disturbances of sight and unconsciousness occurred three days earlier. Hyperemia of the lungs with retained secretions and food which had escaped into the trachea during the long period of unconsciousness caused inflammation of the lungs. The delivery stopped the convulsions, but the condition of the patient was hopeless even then.

Vesicular Mole with Vaginal Metastasis.—Opocher (Folia Gynecologia) mentions a case of vesicular mole noticed by him, after the delivery of which a similar mass appeared on the wall of the vagina, accompanied by metrorrhagia. This eventually disappeared spontaneously. Cases of mole with metastasis are rare in the literature. Only two cases have been reported in which true moles were found in the vagina. The interpretation of these growths is that they represent an active proliferation of the epithelial covering of the villi, with regressive metamorphosis of the connective tissue of the mucosa. The Dr. believes that we have to do with a true vesicular mole developed by metastasis. The special formations described as irregular masses of syncytial elements and Langhans cells should be interpreted as vesicular mole reproducing itself. These masses were formed by an epithelial investment represented by syncytial elements and Langhans cells grouped irregularly. It seems impossible to state from clinical phenomena and histological appearances whether such a growth will become malignant. Dr. Pestalozza says that one out of ten moles is malignant, while Hart says that only one in one thousand is so. He has examined all the cases of mole observed during his service in the Institute of the University of Pavia. The Dr. finds no exact dividing line between moles having the characteristics of vitality and of death. In fact, they contain structures which show the characteristics of both. He does not agree with those writers who have found in patients with vesicular moles such grave general symptoms as vomiting, edema, anemia, and emaciation. In the cases seen by him these symptoms have been absent. If the mole is actively proliferating they may be present. Such moles have the characteristics of malignancy.

Pyloric Stenosis in Infancy.—Marsh and Monsarrat (Brit. Jour. Child. Dis.) say that when the diagnosis of stenosis has been established our first object should be to find, if possible, a food that will agree with the infant; and as breast-milk is as a rule the best, it should, when possible, always be given. Every endeavor should be made to keep the milk secretion active, particularly in cases when the vomiting is severe and in which it is advisable to abandon breast-feeding for a day or so and substitute for it sterile or albumin-water. If it is impossible to obtain the mother's milk or that of a wet nurse, then sterile water with 6 per cent. lactose, one ounce every hour for twenty-four hours or longer, should first be given; to this peptonized or citrated milk, beginning with a teaspoonful to each ounce, may gradually be added, and as the vomiting becomes less the quantity of milk and the intervals between the feeds may be slowly increased until the infant is taking that amount of nourishment which its weight and age demand. If the vomiting is frequent, for the first few days the stomach should be thoroughly washed out with warm water night and morning, and if improvement follows it should be continued at least once a day for a couple of weeks or even longer, after which time it can, as a rule, be gradually discontinued. If the infant is much exhausted and the fontanelle depressed administer continuous saline per rectum. Opium or atropin, both of which have a specific relaxing effect upon the spasm, may be given in small doses, and with them an alkali, on the assumption that there is hyperacidity. Purgatives should be avoided. So long as weight is sustained, even though there may be no increase, perseverance with medical measures is justifiable. If weight is lost it points to the fact that the hyperplasia is of such a degree that even with spasm allayed no sufficient amount of food can be passed through the narrowed pylorus. Seven to ten days is long enough to show definitely whether medical measures are going to achieve their purpose. If, however, there is no amelioration at all, there is no reason why this period should not be shortened.

Treatment of Extensive Caries in Children by Extraction—Coyler (The London Medical Lancet) says that he treats extensive caries in children by extraction. The principal criticisms brought against this method of treatment have been: 1. That the loss of mastication area interferes with the growth of the child. 2. That the effect on the permanent series is to cause irregular eruption and crowding of the teeth. These criticisms are not altogether supported by facts, and the effect of the removal of the teeth on the general health of the child is beneficial rather than harmful. The harm accruing to the permanent series is slight and well outweighed by the gain to general health. The treatment consists in the removal of all functionless deciduous and permanent teeth. It is urged that such treatment robs the child of masticating power, but such teeth are useless as far as the function of mastication goes; indeed, they render the first permanent molars functionless, because a child with tender teeth "bolts" food and cannot chew.

Differential Diagnosis of Hodgkin's Disease and Tuberculous Adenitis.—Melland (Edin. Med Jour.) says that tuberculous adenitis, though in its early stages particularly amenable to medical treatment, is a condition which is liable to drift into the hands of the operating surgeon. The complete removal of the glands is a speedy and direct route to results which other methods attain more slowly. Operation in Hodgkin's disease is always unsatisfactory and in some cases disastrous. In advanced cases of Hodgkin's disease, there is almost always a severe grade of anemia, though in the earlier stages often little or none. The distinctive feature is a diminution in the number of the leukocytes with a relatively high proportion of lymphocytes. With a case with enlarged glands, in which the temperature, after keeping quiet for a while, suddenly begins to rise, suspect Hodgkin's disease. The temperature in tubercular adenitis is either normal throughout or else shows the regular hectic character of tubercular infection, and never takes on this recurrent type. Calmette's ophthalmic tuberculin reaction is of value in differentiating these affections.

Miscellaneous.

An Interesting Announcement is Made in This Issue by The H. K. Mulford Company Concerning Meningo-Bacterin (Meningococcus Vaccine).

Bacterin therapy is long past the experimental stage, and the immunizing effect of typho-bacterin, for instance, is thoroughly established, the results from its use being sufficient evidence of the worth of this method of controlling the spread of typhoid fever. Remarkable results likewise have followed the use of cholera-bacterin and it is hoped that equally good results will follow the use of meningo-bacterin in controlling epidemics of cerebrospinal meningitis. While immunization with Meningo-Bacterin has thus far been used in relatively few cases it is entirely reasonable to believe that it will prove a most valuable aid in the suppresion of epidemics of cerebrospinal meningitis.

Like the other bacterins Meningo-Bacterin is a suspension of the killed bacteria in normal saline solution (0.85 per cent.) The cocci are grown upon a serum agar for about 24 hours, then washed off and suspended in salt solution. They are counted by Wrights method to determine the number of cocci in one cubic centimeter of the suspension, then killed by heating to 60° C. for one half hour. After dilution of the thick suspension with normal saline solution (0.85 per cent.) so that the two strengths are obtained, the now completed bacterin is subjected to rigid aerobic and anaerobic tests to assure the absence of live germs or spores. Guinea pigs are also injected to be certain that there are no harmful substances in the bacterin. Trikresol (0.25 per cent.) is used as the preservative.

Meningo-Bacterin is polyvalent, i.e., a number of different strains of meningococci are used.

DIRECTIONS.

The usual site for inoculation is the arm at about the insertion of the deltoid muscle. The dose is given subcutaneously and not into the muscle nor into the skin. An area about the size of a five cent piece is painted with tincture of iodine. The syringe needle is plunged through this area. No after treatment is necessary.

The complete immunization treatment consists of three doses given at intervals of from five to ten days. The first dose is 500 million, the second dose 1000 million and the third dose 1000 million.

For children smaller doses should be used according to weight. It has been suggested that the unit of body-weight for a full dose be considered 150 pounds.

Meningo-Bacterin for immunizing is supplied in two distinct styles of packages.

First.—For immunizing one person there are supplied three syringes, each containing the proper amount for injection, designated respectively, first, second and third doses. The first syringe contains the initial dose of 500 million killed meningococci, and the second and third 1000 million each. The contents of the first syringe are to be injected as the initial dose, to be followed five to ten days later by the contents of the second syringe and again five to ten days later by the contents of the third.

Second.—For immunizing ten persons, Meningo-Bacterin is supplied in hospital or Board of Health packages containing thirty ampuls or ten complete immunizing doses. The initial doses (500 million killed bacteria) are contained in the ampuls with the red label, the second doses (1000 million killed bacteria) in ampuls with the white label and the third doses (100 million killed bacteria) in ampuls with the blue label.

In each case the first injection is 500 million (red label), the second 1000 million (white label) is administered five to ten days later, and the third of 1000 million (blue label) is injected five to ten days following the second injection.

No syringe is supplied with the hospital-size package, since it is expected that physicians using the same will employ their own hypodermic syringe, after sterilization. The method of withdrawing the vaccine from the ampul is to moisten the rubber top or cap with a drop of Liquor Cresolis Comp., U. S. P., or 5 pe. cent. solution of carbolic acid; push the needle through the drop of antiseptic on the rubber cap, and then invert the bottle and slowly withdraw the required amount for injecting, following the instructions for the three injections necessary as directed.

The H. K. Mulford Company also supply Anti-Meningitis Serum prepared after the method of Flexner and Jobling, and they will mail upon revuest to the Philadelphia office, Mulford Working Bulletin No. 8, on Anti-Meningitis Serum, giving a detailed and impartial review of the literature.

A New State Laboratory for Texas.

A State laboratory for the manufacture of antimeningitis serum, diphtheria antitoxin, typhoid fever serum, and smallpox vaccine is to be established in Austin, Texas. The Uhited States Marine-Hospital Service will furnish an expert to supervise the manufacture of the serums and vaccines and the State will be represented by Dr. Key, State bacteriologist.

On the Permeability of the Meninges to Salicylate of Soda.

MM. Marfan and Lagane had made investigations on 12 cases, of whom 11 were children between the ages of 4 and 14 years. Two were the subjects of severe acute articular rheumatism, and had taken in the course of 10 and 9 days large doses of salicylate of soda (44 and 28 grm.); the others had had smaller doses—1 to 2 grm. per diem. Among these last, 3 were attacked with tuberculous meningitis at the onset, the existence of which was shown by histological and bacteriological examination of the cerebro-spinal fluid and afterwards by autopsy; two had severe chorea without appreciable lymphocytosis in their cerebro-spinal fluid. The 5 others had different ailments, e.g., incontinence of urine, epileptiform attacks, Duchenne's paralysis, vomiting with acetonæmia and pleuro-pulmonary congestion. The cerebro-spinal fluids were examined on the second, third and fourth days after the commencement of the treatment and about the eighth or tenth day. In these cases they had noticed the rapid appearance of the reaction characteristic of salicylic acid in the urine and in the pleural fluid, but in none of them in the cerebro-spinal fluid. In the case reported by MM. Nobecourt and Darre there must have been some alteration produced in the meninges by the rheumatism whtch rendered their cells permeable to the salicylate. —British Journal of Children's Diseases.

Gratitude vs. Justice.

The Standard Oil Company has been one of the best business organizations the world has ever seen. In its earlier history it had obtained railroad rebates, in a period when every other business enterprise also expected such favors. It crowded small competitors ruthlessly, in a period when neither in law nor in custom had we worked out the principles of a code to define the proper nature and extent of competition. The Tobacco Company, it is true, had used monopolistic power greedily, and had destroyed small manufacturers and dealers by means not defensible from the standpoint of the rights of private citizens nor from that of the public welfare. Yet even the Tobacco Company had for years professed its eagerness to abandon any unlawful practices that the government would designate. This magazine has always favored the proper control of business to prevent harmful practices. It has advocated the Federal regulation and control of large corporations, and it has denounced the humbug of the methods used to drag corporations through the courts under the pretense of enforcing ihe Sherman Anti-Trust law. The gentlemen of enormous fortunes who control all the subsidiary companies of the Standard Oil, Tobacco, and various other tests, are to be congratulated that they can go to bed at night with the feeling that they are free from the apprehension and uncertainty that troubled them when officers of the United States Government were not merely seeking to dissolve their holding companies, but were filling thousands of printed pages with allegations and testimony intended to make these men out as guilty of countless crimes. For they, too, might have been in the predicament of the great Chicago meat-packers and the New York Sugar Trust magnates, who have suffered indictment and are now undergoing trial. No one can very well complain that these fortunate oil men and tobacco men have been won over to an enthusiastic support of the administration in its demand for another term. They are grateful for escape. But public justice calls for solutions that will relieve business from caprice and tyranny. It is justice, not favor, that the situation demands.—From "The

Progress of the World," in the American Review of Reviews for April.

The Effective Treatment of Constipation.

Gradually the profession are beginning to realize that Prunoids offer the ideal treatment for all forms of constipation, traceable to functional causes.

They produce their results by stimulating normal secretions, rapidly increasing the fluid content of the feces and gently increasing peristalsis. They are extremely palatable, easily taken by even young children, and when brought in contact with the secretions rapidly disintegrate and produce their specific medicinal effect.

Probably the most gratifying feature of Prunoids is what, for lack of a better term, may be called their remote effect. While prompt and decided catharsis follows their administration in six or eight hours, a mild and salutary laxative influence is observed for several days after the final dose of Prunoids. Other cathartic measures act just the reverse, and after their use the bowels invariably show greater lethargy and sluggishness.

Discrimination in the Selection of Bromides.

A prominent physician recently said: "It is a mystery to me why bromide of potassium is so generally used by the profession. Its action is not near as reliable as the bromide of sodium, and better still is a combination of the bromides. For such a preparation I use Peacock's Bromides, as I know it is made of the purest salts, and the difference between its therapeutic action and that of the commercial salts is very great. I have used it for years and it is always reliable and staple. It is impossible to obtain satisfactory results in prescribing bromide of potassium, and thus I have depended on this preparation. I have also learned that it is necessary to see that my prescriptions for it be filled at a first class pharmacy."

The purity, uniformity and palatability of Peacock's Bromides, to say nothing of its exceptional quality, readily account for its broad acceptance as the standard bromide preparation.

The Careless Use of Cathartics.

The evil effects resulting from the indiscriminate use of cathartics and drastic purgatives is only too well known to every practitioner. Drastic cathartics, while producing the effect which the patient thinks is desirable, leave the secretory functions of the liver in an enfeebled and exhausted condition, so that a return to the constipated state is certain. In such conditions the physician will find Chionia a most valuable assistant, combining it with an occasional cathartic when indicated and gradually diminishing the dose of the cathartic employed. The administration of Chionia should be continued some time after the cathartic or purgative has been discontinued.

Rheumatoid Arthritis.

The not infrequent mistake of diagnosing rheumatoid arthritis as gout, and the consequent placing of the patient on a restricted and spare diet, has undoubtedly led, in the author's estimation, to the development of severe and incurable forms of the disease. It is essentially a disease that requires good and nutritious feeding. The diet should be as liberal as the patient can digest, and animal food partaken of freely, though not to the exclusion of vegetables.

The drugs which the author has found most useful in rheumatoid arthritis are guaiacol and potassium iodide. After employing the former drug in several thousand cases the author claims that if given in sufficient quantities and long enough it is capable in the great majority of cases of arresting the disease, diminishing the size of the joints, and permitting increased movements. It also relieves pain markedly. It is useful in both the subacute and chronic forms of rheumatoid arthritis, and probably acts by inhibiting the growth of the specific microorganism in the intestinal tract, and after absorption by combining with the bacterial toxins and assisting in their elimination. The author gives the carbonate of guaiacol in cachets. At first from 5 to 10 grains of the drug should be given three times daily, and the dose then increased by 1 to 2 grains each week up to 15 or 20 grains. It is essential that this treatment be continued for at least twelve months. The beneficial effects are increased by combining with the guaiacol of a mixture containing 10 grains of potassium iodide in each dose; the depressing effect of the iodide should be counteracted by means of tonics. This plan of treatment the author considers far superior to that with arsenic and iron. If it is commenced in the comparatively early stages of the disease, recovery with very little deformity may result; but even if after arrest of the disease there is much deformity considerable joint mobility may be obtained with baths, superheated air, massage, and passive movements.

In the early stages of those forms of rheumatoid arthritis which are associated with Reymond-like symptoms and cramps in the extremities, thyroid extract is of great value, but the author has not found it useful in the later stages.

The thermal treatment of the affected joints, either by means of baths, superheated air, or electric light baths, is most beneficial. Douche massage is the most effective form of treatment with hot water, and perhaps next to that rank peat baths and brine baths. Properly regulated movements and massage are helpful to overcome stiffening of joints and the muscular wasting.

The Bier method of hyperemia is often of great use when the joints affected are few in number. It can be employed even when the joints are acutely inflamed and often gives great relief from pain.

Where the joints have become more or less fixed owing to fibroid thickenings, fibrolysin is of value, and if this is followed by massage of the affected parts the thickened tissues stretch and undergo absorption.

In those cases of arthritis secondary to a chronic colitis, irrigation of the colon by the Plombieres method will be found very effective.—Luff, The London Practitioner.

Chronic Arthritis and Gout.

The author reports his experiences with the use of radium emanations in 400 cases. The patient was in most instances subjected to the emanations in a closed room for two hours at a time, and the total number of sittings for each case was 24 to 36. Injections of soluble radium salts in the neighborhood of the involved joints were also given to these patients. Super-heated air, electric light and brine baths were also administered. Absolute rest in bed was found to be a good adjuvant to the treatment. In describing, in general, the results obtained, the author states that joint inflammations in children are particularly benefitted by radium, but that arthritis in the senile, as well as tuberculous or syphilitic arthritis, is but little influenced. Cases of very long standing with marked joint alterations are not suited for the treatment, as a severe local reaction may occur. The blood of 50 cases of gout was examined before and after the treatment; whereas before treatment the blood had contained considerable amounts of sodium monourate, after treatment the uric acid had disappeared in 37 instances. An increase of the symptoms is generally caused by the treatment at first, but in three or four weeks, synchronously with disappearance of uric acid from the blood, marked amelioration becomes evident.

While the radium emanations are of great service, dietetic measures should not be overlooked. A low purin diet should be tried, at least, for a few weeks or months. If it gives no appreciable results, however, it may then be discontinued and replaced by a simple mixed diet, including as much of green vegetables and fruit as the gastro-intestinal tract will stand. Consumption of alcoholic beverages should be limited, though absolute interdiction is required only in a relatively small proportion of cases. The amount allowed should be gauged according to the condition of the patient's nervous system and the habits prevalent in his country.—Gudzent, Berliner klin. Wochenschrift.

Haematocele and Early Malignant Disease of the Testis.

The resemblance between early malignant disease of the testis and an old hæmatocele may be so close as to defy the usual methods of examination. In both conditions, there is a tumor in which the details of the testis are obliterated, there may be an indefinite sense of fluctuation with variations in consistency, transulency is absent, and a history of injury is the rule. The cord may be normal, or, even in simple hæmatocele it may be slightly thickened. From a consideration of these points, Woolfenden urges that operation should be at once performed in all cases of malignant testicle, though the signs are still doubtful and resemble those of hæmatocele and in all apparent hæmatoceles with thickened walls, in the fear that malignant disease may be present. Even at the operation, when the testicle in the tunica vaginalis has been delivered, it is often impossible without incision of the tunica to determine which of the two conditions is present. Three cases quoted to illustrate the difficulties, especially when a distinct history of accident is obtained. In one, diagnosis of haematocele was made by several surgeons, yet the tunica vaginalis was found normal in thickness and to contain only a few drops of lear fluid, while the testicle was the seat of a chondrosarcoma. The accident may have caused an increase in the rate of growth, or merely drawn the patient's attention to the swelling.—Edin. Med. Jour.

Acute Rheumatism Among Children: An Inquiry Into the Prevalence of Acute Rheumatism and its Consequences Among Children of School Age.

F. Langmead (Lancet) records the results of a systematic examination of 2556 children attending the London County Council Elementary Schools. Each child was stripped to the waist and the heart was examined by the ordinary clinical methods. Where any suspicion of previous rheumatic infection arose, the parent was questioned as to previous ill-health, and previous or existing rheumatism in other members of the family. Children were only considered rheumatic if they showed definite evidence of rheumatism or its effects, or if the condition found suggested rheumatism, and further inquiry from the parent afforded strong enough collateral evidence to remove all reasonable doubt. Approximately equal numbers of boys and girls were examined. Fifty-nine boys and seventy four girls could be classed as definitely rheumatic, giving a percentage incidence of 5.20 for children of all ages attending school, or 6.83 for children in the senior departments, i.e., from six and a half to fourteen years of age. The proportion of rheumatic children gradually increased as they grew older, being .60 per cent. at four years of age, and 8.94 per cent. at thirteen. In most cases the condition of the heart was that which first attracted attention. Out of 133 children classed as rheumatic, 115 showed some sign of cardiac disorder. Rheumatic heart affection occurred in 4.49 per cent. of the children of all ages attending school, or in 5.94 per cent. of those in the senior departments. Obvious valvular disease was found in 2.93 per cent. of children at all ages, or 3.92 per cent. of those in the senior departments. Chorea occurred in 18 cases only, or 70 per cent., of whom twice as many were girls as boys. The incidence of other rheumatic affections was—polysynovitis 1.64 per cent., growing pains 1.37 per cent., and tonsillitis 1.25 per cent. It is pointed out, however, that the percentage of fleeting and consequently easily forgotten forms of rheumatism is probably far below the average, whilst no data of value could be obtained of such rheumatic manifestations as anæmia, which when occurring alone could not be classed as rheumatic. The frequency of tonsils and adenoids in rheumatic children is interesting. An overgrowth of the tonsils or pharyngeal mucosa occurred in 58 cases, or in 43.6 per cent. of the rheumatic children, and this was sufficient to warrant operative interference, in 37, or 27.8 per cent., of the rheumatic cases. The usual percentage of school children requiring operation for tonsils and adenoids is 7 or 8. —Brit. Jour. of Child. Dis.

The Sheffield Open-Air School.

Ralph P. Williams (Brit. Journ. Tuberculosis) gives an account of the progress of the open-air school campaign in Sheffield. The school was ordinarily visited twice weekly by one of the school nurses, although a considerable number of extra visits were paid when detailed medical examinations were in progress, especially during the opening and closing weeks. The cleansing scheme was thoroughly carried out, and home visits paid, advice being given to the parents when necessary. On admission the children's teeth are examined by a dental surgeon, and in most cases suitable treatment is applied. All meals were served in an open-air shed. With regard to personal hygiene, each child was provided with the following articles, which were numbered: Washable bag, containing brush and comb, tooth-brush, hand-towel, bath towel, other numbered articles being a deck chair and foot-rest, blanket, and rain cape. The cleansing of the teeth was carried out daily. Special attention was given this year to physical exercises, and the good results which have been obtained in regard to increased chest capacity are no doubt largely due to the thorough way in which these exercises were taught. A satisfactory increase in weight occurred. An increase of chest measurements was noted in all the children, this beneficial increase in breathing power being largely due to physical exercises and increased nutrition. In conclusion it may be pointed out that the open-air school has an important educational influence on the parents; the necessity of sufficient rest, combined with regular, plain, feeding and an open-air life, being impressed upon them by the success of these methods in the treatment of delicate children.—British Journal of Children's Diseases.

The Superiority of Cod Liver Oil in Palatable Form.

Whilst none questions the nutritional and therapeutic properties of cod liver oil, yet what avails it when its administration provokes gastric disturbance. If the gastric function be interfered with by the oil, it were better not to give it. Chemists long ago began endeavors to overcome the undesirable features of the oil, and how well they have succeeded is shown in that most palatable, and yet efficient product, Cord. Ext. Ol. Morrhuæ Comp. (Hagee) which, while possessing all of the food and medicinal virtues of the plain oil, is agreeable to the most exacting stomachs, even when continued over long periods of time. Cord. Ext. Ol. Morrhuæ Comp. (Hagee) as a reconstructive will prove highly serviceable in the many debilitated conditions, in which it is indicated, and the physician ordering it will be gratified at the results produced.

Functional Heart Disease.

It has long been known that Cactina Pillets are especially serviceable in all functional disorders of the heart, as well as in certain phases of the common organic lesions.

They are safe, reliable, and do not manifest a cumulative action. Associated with digitalis, Cactina Pillets act as a valuable synergist, making possible the use of much smaller doses of digitalis in the production of desired effects.

As has been previously said, Cactina Pillets improve cardiac nutrition. Under its use the heart's action is slowed and materially strengthened. No miraculous claims have ever been made for Cactina Pillets, but in suitable cases clinical experience has repeatedly demonstrated its extraordinary value as a persuasive tonic.

In Convalescence Fro~ Fevers.

In convalescence from febrile disorders Seng imparts a desirable tonicity to the alimentary structures, coaxing back the vital functions that have been sadly exhausted and depressed. Digestion, absorption and assimilation are substantially promoted, and gratifying improvement in the whole bodily condition follows as a natural sequence.

A New Thyroid Preparation.

To Dr. S. P. Beebe, Ph.D., Professor of Experimental Therapeutics in Cornell University Medical School, the profession is indebted for a new and valuable preparation of the active principle of the thyroid gland. It is a carefully standardized product, consisting of certain proteids of normal glands, extracted, purified and adjusted to a content of 0.33 per cent. of iodine. Its preparation has been entrusted to Messrs. Parke, Davis & Co., and the product is offered to the medical profession under the name of Thyroprotein (Beebe).

The selection of normal glands for use in making Thyroprotein, it may be noted, is a very important matter. Heretofore the glands of sheep have been used in medicine, and it is now known that sheep from certain parts of the country always have goitrous glands which are rich in content of proteid of the thyroglobulin type but contain very little iodine. This fact alone accounts for much of the variation noted in thyroid therapy. Furthermore, the thyroid gland as a whole contains certain substances which appear to be not only useless but actually harmful. In the preparation of Thyroprotein these objectionable substances are rejected.

For therapeutic administration the proteid (thyroprotein) is diluted with milk sugar and made into tablets, each of which weighs exactly two grains. These tablets are supplied in three strengths, containing, respectively, 1 per cent., 2 per cent. and 5 per cent. (of 2 grains) of the active medicament. The 1 per cent. and 2 per cent. tablets are used almost entirely in the treatment of goitre. The stronger (5 per cent.) tablets are employed in metabolic disorders, as skin lesions, joint affections, myxedema, cretinism, or other conditions in which there is markedly deficient thyroid activity.

Physicians who are desirous of learning more of this new thyroid preparation will do well to send a request to the manufacturers, Parke, Davis & Co., at their home offices in Detroit or any of their branch houses, for their new booklet descriptive of the product. It bears the title "Thyroid Therapy" and contains a lot of useful information.

Funk & Wagnalls Company have secured the American rights to "A System of Surgery," edited by C. C. Choyce, Dean of, and Teacher of Operative Surgery in the London School of Clinical Medicine, (Post-Graduate), etc. J. Martin Beattie, Professor of Pathology and Bacteriology and Dean of the Faculty of Medicine in the University of Sheffield, is the Pathological Editor of this important new work.

It will be published in three octavo volumes and profusely illustrated with colored, black-and-white, and text illustrations. Each branch of surgery is treated by the foremost specialists in that particular branch in Great Britain so that the work will really comprise the whole field of surgery from the view-point of the foremost British practitioners.

Volume I will be ready about the middle of April and the remaining two volumes will be published about Autumn 1912. The price of the work will be $21.00 per set.

State Board Examination Questions of New Hampshire.

ANATOMY.

1. With what bones does the superior maxillary bone articulate?

2. What muscles flex the fingers? Give method of attachment of ligaments of the same.

3. Describe fully the peritoneum.

4. Give location of apex beat, and area of dullness of the normal heart.

5. State fully the method of exit of the nerves from the spinal cord through the foramina in the vertebral column.

6. Describe the ligamentum nuchæ.

7. Enumerate and describe the pectoral muscles.

8. Give origin, course, termination, and branches of brachial artery.

9. Bound and give contents of popliteal space.

10. What tissues are severed in reaching an appendix by the right semilunaris incision?

PHYSIOLOGY AND HYGIENE.

1. Give the normal temperature of the body and two physiological reasons for increased temperature.

2. What is the physiological function of lymph and chyle?

3. Name the physical properties of normal urine.

4. Describe the normal and abnormal motor processes of the stomach.

5. What is Wallerian degeneration? How may it be made use of in studying the course of a tract of nerve fiber?

6. Describe the causes for each step in the passage of oxygen from the atmospheric air to the tissues.

7. What are the healthful preservatives for foods?

8. What diseases should be reported to the board of health, and why?

9. What are the sources of bacteria in milk, and how would you control?

10. What are the physical and chemical characteristics of healthful water?

CHEMISTRY.

1. Explain the difference between a (a) solid, (b) liquid, (c) gas.

2. (a) Define capillary attraction. (b) Why is it so called? (c) Mention some familiar examples.

3. What is electrolysis?

4. What is the composition of baking powders? How are they adulterated? What is their mode of action?

5. Define chemical affinity (chemical force, or attraction, chemism), and give example.

6. Describe the purification of water by distillation and by filtration.

7. What is the effect of diluting tincture of iodine with water, and what practical application is drawn therefrom?

8. What is the action of KHO when taken internally, and what antidotes should be used?

9. Why is zinc sulphate incompatible with the vegetable astringents?

10. In what parts of the body does uric acid occur, and in what form does it exist?

PATHOLOGY AND DIAGNOSIS.

1. Name and describe the germ of syphilis.

2. Give the probable cause and symptoms of calculi of pancreas.

3. Describe a case of Rocky Mountain spotted fever and mention its probable cause.

4. Describe the gonococcus and the method of staining for microscopical examination.

5. Give the causes and symptoms of hemothorax.

6. Give the symptoms and pathology of elephantiasis.

7. Describe a case of Hodgkin's disease and give its pathology.

8. Give the symptoms of disease of the coronary arteries.

9. Describe a case of hay fever and mention some of its probable causes.

10. Give the symptoms of brain tumor.

THERAPEUTICS.

1. What do you understand by Cheyne-Stokes respiration, and under what conditions may it occur?

2. Give the etiology and treatment of acute sciatica.

3. Describe, briefly, the conditions that would lead you to diagnose chronic interstitial nephritis, and give your treatment.

4. What symptoms would lead you to diagnose gastric ulcer and what would be your treatment?

5. What is Bell's palsy and what pathological conditions may produce it?

6. Give the symptomatology and treatment of tetanus.

7. Give the therapeutics of ergot and the symptoms of acute and chronic ergotism.

8. Give the therapeutics of chloral hydrate and the symptoms of a toxic dose of the drug.

9. Under what conditions would you expect enlargement of the spleen?

10. Give the symptoms of acute pancreatitis.

OBSTETRICS.

1. Describe the change in position which the uterus undergoes during pregnadcy.

2. What is "morning sickness," when does it begin, how long does it generally continue, and what are its causation and treatment?

3. What are the danger signals of impending eclampsia?

4. What are the symptoms of an inevitable abortion?

5. What are the dangers to the mother during the second stage of labor?

6. Symptoms and conditions leading you to diagnose death of the fetus.

7. How can you distinguish between first and subsequent pregnancies?

8. Give indications calling for podalic version.

9. What conditions of the mother might be mistaken for pregnancy?

10. Treatment of placenta prævia.

SURGERY.

1. Describe a method of reduction of a dislocation of the inferior maxillary bone.

2. What is a Colles' fracture? How would you treat it?

3. What are sources of wound infection?

4. What do you understand by primary

and secondary shock?

5. Describe intravenous saline transfusion and give dangers of the operation.

6. How and where would you trephine for cerebral hemorrhage?

7. What do you understand by complete operation for mammary cancer?

8. Describe operation for gallstones.

9. Describe Bassini's operation for inguinal hernia.

10. Give the differential diagnosis of pelvic peritonitis and impaction of feces.

Dietary for Arthritic Children.

1. Turnips with white sauce: Cook thoroughly after washing, and then remove all water by straining. Cover them with several tablespoonfuls of white sauce. Serve.

2. Puree of turnips: Prepare them by washing and boiling in water as above; when ready to serve, add one-third of their weight of puree of potato.

3. Oyster-plant: Chop up finely a rhizome of salsify (oyster-plant) after washing in water slightly acidulated. Dilute four tablespoonsful of farnia in two quarts of water containing the juice of half a lemon. Put the oyster-plant into this dressing and boil. Allow to cook slowly for an hour and a half.

4. Oyster-plant with white sauce: Cook the pieces as they are, and drain, serving with a separate portion of white sauce.

5. Oyster-plant with beef juice: Cook in water as they are, and drain, basting with the dish-gravy of roast-beef, which has had the fat removed.

6. Opster-plant as a puree: Cook the rhizomes, and mince them thoroughly, then mash. Add to the puree a little butter and a few tablespoonsful of cream.

7. Custard: Boil a pint of milk with five tablespoonsful of sugar and flavored with vanilla. Pour this luke-warm milk upon four beaten yolks of egg. Mix, and pour into stout white cups. Bake twenty-five minutes.

8. Vanilla cream pudding: Boil a pint of milk with six or seven tablespoonsful of sugar, flavored with vanilla. Pour this, luke-warm, upon four beaten yolks of eggs and one entire egg. Mix thoroughly and cook for twenty-five minutes. Allow to cool and mould.

9. Snowy eggs: Boil a pint of milk with six tablespoonsful of sugar, and flavor with a little vanilla or orange. Separate the whites and yolks of four eggs. Beat up the whites until quite firm and sweeten them. Add them by teaspoonful to the milk as it boils, so that they are upon the surface, turn them, and remove them by a skimmer. When all the whites have been so cooked, beat the yolks, mix them with the milk which has been strained and again placed on the fire. Stir until it thickens and pour over the whites, not quite concealing them. —Paris medical.

Thoughts of an Elderly Physician.

1. Care for as you would be cared for.

2. A good physician is one who can individualize.

3. Never show anger towards a child.

4. Show to the patient that you perceive the *why* of his ailment, but do not render him as wise as yourself.

5. Go, when the patient requires you, but do not go beyond his desires.

6. Treat a question in detail: a massage may be measured by the proportion of talc expended.

7. A doctor in a vehicle never looks like a fool.

8. Always remember, by the bedside, that you have treated a similar case and that you relieved your patient.

9. Everybody requires a miracle, a sick person most of all.

10. Make people understand frequently that your conception of your profession differs from theirs.

11. Take any payment when offered (adds the French monitor), It is customary in England, and English people are acquit of false sentiment.

12. In regard to your fee, remember that people will weigh your science in proportion to the number of dollars you receive.

13. It is never permissible for a doctor to be in a hurry except in the midst of an operation, or when he finds a patient sleeping.

14. Never explain to a wise patient; you may thereby conflict with his ideas, and his theories of treatment.—Paris medical.

Experiments on the Pharmacological Effects of Salvarsan.

Ferrannini states that we know much about the therapeutic effects of salvarsan but little about its pharmacology. He has therefore instituted a series of experiments to ascertain its effects on the skin, mucous membranes, subcutaneous and submucous tissues, and endothelium of the vessels. His conclusions are that in the solutions generally used therapeutically it has no effect on the skin, mucosa, and endothelium of the vessels. It manifestly irritates the subcutaneous tissues, which explains the inflammatory process which is intense but generally ends in resolution. In subcutaneous injections the substance remains a long time in contact with the subcutaneous tissues, while when rubbed on the skin, instilled into the eye, or injected into a vein it remains for but a short time in contact with the tissues.—La Riforma Medica.

Bier's Hyperemic Treatment.—Waterhouse (Brit. Med. Jour.) says that the object of this form of treatment is to produce or increase a hyperemic state of the morbid area that the increased blood supply may aid the tissues in their fight against the invading micro-organisms. He is unable to reconcile this method of treatment until the present accepted teaching concerning the physiology and pathology of inflammation, but he is convinced of its great value from his years of experience with it. Two fundamental rules must be observed. (1) During the application of the treatment it is of prime importance that the blood should continue to circulate freely throughout the part. When the constricting bandage is employed, this may be determined by the pulse, when a cupping glass or hot air is used, it may be determined by the color of the skin and by the sensations of the patient. (2) The treatment must be painless, or, at least, must lessen already existing pain. Furthermore, whenever pus is present, it must be evacuated by a small incision before the treatment is applied. In doubtful cases the presence of pus may be determined by the fact that the application of the constricting bandage or the cup causes or increases pain in the part.

The treatment secures (1) the arrest or mitigation of an infective process, (2) the prevention of suppuration in many cases where it is threatened, (3) mitigation or relief of pain, (4) avoidance of operative treatment, or the necessity for less severe operation than otherwise, (5) saving of time in cases of suppuration and necrosis, e.g., in carbuncle, (6) stimulation of the process of repair, as in delayed union of fractures.

The treatment may be applied by (1) the constricting bandage, (2) the suction cup, and (3) the hot air chamber or douche. The first method is by far the most useful and is indicated in (1) whitlows, (2) suppurative arthritis of upper or lower limbs, after an incision into the joint, (3) all varieties of pyogenic infections of the limbs, (4) tenosynovitis of tuberculous, pyogenic or gonococcic origin, (5) gonorrheal arthritis, (6) ununited fractures, (7) crushing injuries of hand and foot, (8) chilblains, (9) tuberculosis of knee and elbow and other parts distal to these.

The cupping glass acts only superficially, and can be applied only for short duration. For example, in tuberculous disease of the wrist, the bandage may be applied for sixteen to eighteen hours daily; while on a carbuncle of the back, the glass may be applied but an hour daily, and that only for five minutes at a time. It is suitable for (1) furuncles and carbuncles, (2) acute and chronic abscess after incision, (3) in acute or chronic mastitis. The treatment must not cause pain.

The heated air chamber and the heated air douche are the least valuable of the three methods. In the former the temperature should be raised gradually and should never exceed 250° F. It is valuable in chronic arthritic and osteric affections, in promoting absorption of adhesions and exudates. The douche is often efficient in sciatica and occipital neuralgia and in cases of chronic osteitis of the superficial bones.

Puncture of the Corpus Callosum for Relief of Cerebral Pressure.—Anton and Bramann (Muench. med. Wochensch.) summarize their experience with this method in the following conclusions: 1. Puncture of the corpus callosum is a simple operation by means of which relief of cerebral pressure can be effected by way of the roof of the lateral ventricles without injury to the cortex. 2. A communication can thus be established between the ventricle and subdural space for a long time, and this can be kept open for at least several months in conditions of persistent pressure. 3. The cerebrospinal fluid is thus afforded not only a larger area for diffusion, but also a more extensive surface for absorption, one cavity being connected with another without the necessity of drainage tubes. 4. It is possible to establish communication between the third ventricle and the other brain cavities, which may be desirable in cases in which it is distended. If there is any suspicion of the presence of a neoplasm or cyst in the fourth ventricle, puncture of the corpus callosum may be indicated for the temporary preservation of sight, since it has been found that after this procedure choked disc may be diminished or at least prevented from progressing to any extent, and also because the preliminary relief of general cerebral pressure will prove of value during the preparatory stage before operation. It is advisable in such cases to open up the cerebellum and fourth ventricle as soon as possible. In two cases after trephining the occipital region and drainage of the fourth ventricle disappearance of choked disc was observed.

Cardiovascular Degeneration.—Bruce, in The London Lancet, takes up the influence of nervous, intellectual, and emotional stress, also the question of arterial degeneration in women. The Dr. then discusses the relative value of physical signs and symptoms and gives considerable space to prognosis, which is too often unfavorable with the inexperienced practitioner. The adviser should be careful to exclude tobacco and sudden strains when confronted with a sudden angina. Treatment includes the consideration of syphilis, glycosuria, gout, physical strain, and nervous stress. His general remarks on treatment may be summarized as follows: If we review the indications which we have found under the different kinds of cardiovascular degeneration, the subject of treatment appears in a more satisfactory light than when it is regarded from the point of view of a single substantive disease. The result in many instances is good for a time. The nutrition of the cardiac and vascular walls improves, and pressure is kept within moderate bounds, and thus the natural resistance and provisions for compensation with which the organs of circulation are endowed are successfully maintained. The management of the case now consists in retaining the control which we have gained of the cause of the disease, and in resisting as long as possible the growing dangers for which we must be prepared, as we have seen under prognosis. Whatever its origin, degeneration is essentially progressive—slowly or rapidly. The patient is past his prime; treatment must be carefully adapted to the circumstances of advancing age. The original cause may be still at work, as in gout, or it may be dormant only. Specific measures cannot always be safely omitted. The patient is beset by the incidental circumstances and events of life—professional, social, and domestic—causes of occasional embarrassment and distress threatening compensation, whether by affecting the nutrition of the walls or by raising the blood pressure. The syphilitic subject develops gout or nephritis. The glycosuric subject meets with misfortune in business, or he is tempted to eat heartily again, and narrowly escapes death in an attack of paroxysmal dyspnœa. The gouty man foolishly taxes his enlarged heart in a fit of determination to cure himself with active exercise. Here we see necessity for observant supervision of the patient's whole manner of living. It is surprising how largely success in treatment, like success in prognosis, depends on a correct appreciation of these secondary causes of cardiac embarrassment. A man believed to be dying from acute failure of the heart and pulmonary œdema, in this stage of cardiovascular degeneration, has been rescued by active purgation and temporary starvation. But meanwhile vicious circles form and increase in area and in number, slowly but steadily sapping the nutrition and vigor of the heart. Degeneration of the heart and vessels once commenced, necessarily advances and ends in death. For a time treatment is so far successful as to retard the progress of disease and prevent or relieve disorder and distress. But sooner or later it ceases to benefit; and if the patient does not perish suddenly, or from cerebral hæmorrhage or Bright's disease, or in one or other of the ways which we noticed in connection with the different causes, treatment comes to be required in a new direction—for failure of the heart. Even now it is incorrect to neglect entirely the original cause of the disease. But by this time, as a rule, the condition of the patient is too complex for much good to be expected from dissociation of its elements—the primary degeneration, the effects of additional causes of disturbance, the widespread involvement of the circulation and viscera in vicious circles. But the principle that has guided us throughout this study is still to be followed. Failure of the heart must have an immediate cause, and this often can be discovered and dealt with successfully, for temporary recovery is still not impossible. Cardiac dropsy not infrequently yields to rest, correct diet, faithful nursing, and well planned medication in these cases of old degenerated hearts and sclerosed vessels. Even now it is not always too late to use digitalis or its allies; the circulation may still respond to them. At last there is an end to the success that so often rewards a rational view of the nature of cardiovascular degeneration, and the therapeutical management of it on rational principles. Little can be done now but to try to secure euthanasia for a patient dying with cardiac and respiratory distress; to order diet and hypnotics, and, most difficult of all, to make proper use of morphine, to afford what relief we can to the heart which has been maintaining a brave fight against great and ever growing evils for so many years.

Chronic Pancreatitis and Carcinoma.—Balfour (The London Lancet) reports on these conditions with a summary of diagnostic points, as follows: The causes of pancreatitis are: 1. Ascending infection from duodenum; 2, obstruction of pancreatic or biliary duct by calculi (chronic). The diagnosis is to be made from 1. A history of previous attacks of jaundice associated with colic, or of colic alone, which is in favor of gallstones. A beginning with vague pains in the epigastrium, associated with fever and gradual appearance of jaundice, is in favor of pancreatitis 2. Impaction of a stone in the common bile duct is usually associated with severe colicky pain. Pain is especially bad at moment of impaction. The patient is sick and pale, with small feeble pulse, and shivering may occur. No relief is afforded except by morphine or lapse of time. Typical biliary colic is much more sudden and severe than that associated with pancreatic disease, whether inflammatory or malignant. It may fall away as suddenly as it came. It is felt deep in the right side above and to the right of the umbilicus; it extends to the back, and especially towards the right shoulder. The pain associated with pancreatic disease is less violent and unaccompanied by shock, it is lower, and extends to the back lower down and more to the left than that of biliary colic. In some cases impaction of stone in the common bile duct is not associated with pain; nausea then takes its place. 3. The local tenderness due to impaction of a calculus is usually higher and more to the right than that due to pancreatic disease. 4. The jaundice due to stone is more intermittent than that due to pancreatitis, and especially than that due to growth, which gets progressively deeper. Jaundice due to pancreatitis is rarely so deep as that due to growth, but when chronic pancreatitis has lasted a long time the jaundice may become very deep or even greenish black, as in one of the cases. 5. Enlargement of the gall-bladder is against gallstones as a cause of jaundice, although there are exceptions to this rule as to all others. 6. With growth or pancreatitis a vague swelling about the umbilicus is sometimes felt especially when patient is under an anæsthetic. 7. Severe anæmia and wasting occur in pancreatitis and growth, but not until quite late in jaundice due to stone in the common bile duct. So severe are the blood changes that many cases of chronic pancreatitis with but slight jaundice have been diagnosticated as pernicious anæmia. 8. Diarrhœa, with fatty and fœtid stools containing muscle fibres, is commonly associated with pancreatitis, and also with carcinoma of the head of the pancreas. A stone impacted at the common opening of the pancreatic and bile duct may give the same symptoms. 9. Cammidge's reaction should always be tried, as a positive reaction points to inflammation and away from growth.

The Etiology of Retroflexion of the Uterus.—Fritsch (Deut. med. Wochensch.) says that he has observed several cases in which retroflexion occurred suddenly after a trauma. One of his patients, a young girl whose internal genitals had previously been normal, after a fall upon her buttocks experienced at once an intense pain in the lower portion of the abdomen, and an examination on the same day showed the existence of a retroflexion. After reposition under anesthesia and the use of a pessary the pain disappeared, although not until the lapse of a number of weeks. Another of his patients, a hysterical girl, who also had had a normal painlessly movable uterus, met with a similar accident, which was followed immediately by violent abdominal pain and tenderness, persisting for a number of days. The uterus was found retroflexed, and could not be straightened on account of the severe pain until she had been anesthetized. In another case, a woman, two weeks after childbirth, slipped on the stairs and fell upon her buttocks, which was followed by considerable retroflexion of the large uterus and profuse hemorrhage. Fritsch believes that similar conditions may result from protracted mountain climbing with the body bent forward. He thinks that the pressure of a large retroflexed uterus may be sufficient to cause parametric adhesions, which may give rise to persistent pain and inability to work. These complications of retroflexion are observed in seamstresses who spend many hours over the sewing machine, and in piano players. If in such cases reposition followed by the insertion of a pessary or operative intervention be resorted to, all the existing symptoms sometimes vanish with startling rapidity.

Congenital Malaria.

Sabella discusses the possibility of the communication of malaria to the infant by way of the placenta, a subject on which a variety of opinions have been expressed. It has been demonstrated that in many infectious diseases the microorganisms pass from mother to child by the placenta. But communication by the placenta has not been demonstrated for the schizomycetes and some forms of protozoa. The opinion that malaria may be congenital has been expressed by many authors and founded on many cases. Could we find a case in which the parasite of malaria was found in the blood of a new-born child at the same time that it was present in that of the mother the transmissibility would be proven. But no such case has been recorded up to the present date. The author gives the histories of two cases in which malarial parasites were present in the blood of the mother, in both of which abortion occurred. The blood of the fetus in each case was examined and no malarial parasites found on the fetal side of the placenta.—Il Policlinico.

Chronological Relations of Ovulation and Menstruation.

Busquet in considering the chronological relation of ovulation and menstruation, cites the observations of Leopold and Kufferath, who examined the ovaries of women operated on during menstruation, and during the intermenstrual period, with reference to the presence of the corpus luteum. They found that the menstruation occurred at the moment of maturity and rupture of the ovisac. Pouchet has published a case of unique coitus in which the act occurred fifteen days after menstruation and fecundation occurred. Fraenkel was of opinion thet one of the results of the internal secretion of the corpus luteum was to cause menstruation. In nine cases of laparotomy with healthy ovaries he cauterized the corpus luteum and prevented the next menstruation. Villemin found that the cycle occurs thus: the Graafian follicle ruptures midway between the menstrual periods; twelve to fifteen days afterward the corpus luteum is present and menstruation occurs. Conclusions are that menstruation is a nemorrhage caused by the corpus luteum fourteen to fifteen days after ovulation. This questiou could be decided if surgeons would systematically examine the follicles of all women on whom laparotomy is done, in connection with the date of the last menstruation.—La Presse Medicale.

Slight Bronchial Dilatations in Small Children.

Hutinel describes small bronchial dilatations as not infrequent in children, although not so serious and intractable as in the adult. They are not often infected, and fetid expectoration is rarely seen. They occur in hereditary syphilis, in tuberculosis rately, after bronchopneumonia, measles, pertussis, and the aspiration of foreign bodies into the trachea. They are accompanied by a considerable amount of sclerosis and dilatation of the blood vessels of the lung. They often begin insidiously with few symptoms, slight fever, almost no dyspnea, persistent cough, and little else. When they have a more acute course there are more marked fever, purulent expectoration, and moderate dyspnea, with a harassing cough, which recurs easily. The physical signs are moist, subcrepitant rales, large and small, gurgles, and rhonchi. The vesicular murmur is impaired, the voice and cobgh cavernous. If the sclerosis is not marked the cavities may disappear with the development of the lungs. Treatment in the acute attack consists of enveloping the chest in moist compresses. Later general tonic and hygienic treatment, respiratory gymnastics, and life in the open air are valuable remedies.—La Presse Medicale.

Treatment of Exophthalmic Goitre.

An interesting paper by Anastasia Tschikste has been published in the Deutsch. med. Woch., No. 48, 1911, based on work carried out by him in the Bern Surgical Klinik (Th. Kocher) and in the Mediz. chemisch Institut of the university. Tschikste states that clinical and experimental investigations prove that iodothyrin has not the full actions of thyroid extract, and A. Kocher has shown that colloid contains a phosphorus body which varies in amount inversely with the iodine. He refers to Cyon's work as evidence of the physiological antagonism between iodothyrin and sodium phosphate in its action on the cardio-vascular nerves, aud to Kocher's view ihat there is a substance in colloid which acts favorably in exophthalmic goitre. Such is the theoretical basis of the phosphorus treatment by thyroid nucleoproteid. Tschikste obtained nucleoproteid from goitrous thyroids in Kocher's clinic by the method of Oswald, the thyreoglobulin being separated in a half saturated solution of ammonium sulphate and the nucleoproteid in a fully saturated solution. The proteid contained 0.35 per cent. phosphorus. The total quantity obtained was so small that its action could be tested in only one case of exophthalmic goitre in regard to (1) metabolism, and (2) the general condition of the patient. The mode of administration was by deep injection in the gluteal region. After the patient had been under observation for three weeks the first injection of 10 grms. of a 2 per cent. solution in normal saline was giveu on February 26th. Thereafter 20 grms. of a 1 per cent. solution were administered on March 2nd, March 13th, and March 18th. The food given was measured and analyzed, and the stools and urine were carefully examined quantitatively for nitrogen and phosphorus. It was found that after injections there was a retention of nitrogen, so that for the first time a positive balance was established. A similar effect was found in regard to phosphorus metabolism.

The observations appear to have been made with care, and confirm the allied work of Cyon on the action of sodium phosphate. Tschikste lays emphasis on the fact that the retention of phosphorus and nitrogen did not gradually occur, but rather suddenly, and in relation to the nucleoproteid injections. The retention synchronized with rapid increase of the patient's weight, the total increase being 10.5 kgs. from March 18th to April 26th. The other characteristic symptoms of the disease were not influenced greatly, except the pulse frequency, which diminished gradually.

Marine and Lenhart have made a very full investigation of their cases of exophthalmic goitre (Arch. of Internal Med., vol. viii. pp. 265-316). The only practical suggestion made is that in extreme cases the use of 5 minims of the syrup of the iodide of iron should be given once daily for a week, increased during the second week to two doses daily, and double this amount in the third week. It is difficult to understand how such doses can be of material service, ut they believe that by such means a coloid state of the gland may be promoted.

The multiplicity of suggestions alone sufices to show that neither medical nor surical treatment is at present satisfactory. A genuine improvement in the mode of reatment may not be recorded until the physiologist and physiological chemist add onsiderably to our knowledge of the funcions of the gland, and of the specially reated internal secreting glands.

The opinions of Marine and Lenhart, ased as they are on very careful work,can carcely be disregarded, however heterodox hey appear in the following words: "The ssential physiological disturbance of the eyroid in exophthalmic goitre is insufficency, its reaction compensatory, and its ignificance symptomatic." — Edinburgh Medical Journal.

Tuberculin Treatment.

The opinion now is that tuberculin acts n two ways: (1) By giving rise to immunization processes and (2) by causing he so-called area reaction—but the relative value of the two processes is still in dispute. The estimation of the sensitiveness of tuberculin by the reaction to von Pirquet's and he ophthalmic test in tuberculous patients does not, in the opinion of Sorgo and Suess, orm a guide to prognosis, nor does the ensitiveness, as shown by the extent of the general reaction. In patients, however, who have already had large doses of tuberculin, a sudden rise in sensitiveness to uberculin seems to be of unfavorable prognosis and there is often a lasting intolerance to tuberculin and a rapid progress of he disease. There does not seem to be any constant relationship between the intensity of the area reaction and the intensity of the reaction to von Pirquet's or ophthalmic test. The two great methods of administration of uberculin are those of the repeated adminstration of minimum doses, the anaphylacizing methsd and the administration of gradually increasing doses—the immunizaion method.

Until recently the latter method was practically the only one in use, and whatever may be the theoretical objection to it, it has proved practically useful. The other method is now frequently employed. Escheric has found it especially suitable for young children. and it is often the only possible method, because the patient cannot bear any increase of the dose. The form of tuberculin administered does not seem in most cases to be of great importance if the precaution of using the more toxic forms only in large dilutions is taken. T. R. and the bacillary emulsion are, however, the forms best borne by patients with fever, while if Bandelier's observations be correct, bacillary emulsion may be harmful in laryngeal tuberculosis, and should be employed only with caution. An initial dose which may be tried by inexperienced yersons is 0.000001 gram, or 0.00001 gram. With experience the operator may in suitable cases begin with a larger dose 0.0001 gram. The severity of the cutaneous reaction is of some service in fixing upon the initial dose, but taken alone it does not give a certain indication as to how much tuberculin will be tolerated, if, however, a cutaneous reaction is present when a small dose is given and absent when the same dose is repeated, the dose may be safely increased, while in cases of excessive cutaneous reaction it is perhaps advisable not to increase the dose. Small hemorrhages from the lungs do not absolutely contraindicate tuberculin treatment; nor heart affections, though when the cardiac muscle is much affected and subjective symptoms follow an injection, the treatment should be discontinued. Injections should not be given in the case of women during the menstrual period. Patients with fever, or in very poor general condition, those who are very nervous, who suffer from heart disease, or from a tendency to hemorrhages, are to be considered unsuitable.—British Medical Journal.

Forms of Vertebral Rheumatism.

Regnault describes two forms of rheumatic disease of the spine, the osteophytic and the rheumatoid. In the first form there is an overgrowth of bony osteophytes which causes ankylosis of the bones of the spinal column, since the osteophytes overlap the intervertebral cartilages. The articular apophyses are deformed and bony growths cause intense pain through pressure on the spinal nerve. This condition is common in adult and advanced life. Deforming rheumatism causes a kyphosis of a uniform but irregular arc. The articular ankylosis comes from ossification of the interspinous and supraspinous ligaments. The articular ligaments of the apophyses especially are ossified. Horses have the same forms of rheumatism that are seen in man.—Progres Medical.

Bacillus Pneumonia

Pneumonia caused by the Friedlander bacillus differs from the ordinary infection with pneumococcus in many ways. Herpes and chill are often absent and the temperature may be low despite the obvious severity of the disease. The sputum is abundant, mucoid, viscid and varies in color from gray to brownish-red. Microscopically, an enormous number of bacilli can generally be found, while in diplococcus pneumonia, the germ may be very difficult to detect. On pathological examination, the cut surface of the lung is not granular, but softer and more viscid, since the exudate consists almost entirely of bacilli. In about 50 per cent. of the cases, there is a rapid softening of the central portions of the infiltration. Clinically, a diplococcus pneumonia has usually run its course as soon as the chill appears, but in bacillus pneumonia, the course is much more protracted and the patients often die as a result of heart failure or exhaustion. Recovery seems to be the exception and often an abscess of the lungs develops. The temperature is frequently very low throughout the disease. The cause for this peculiar behavior must be found in the persistent and virulent character of the germs and in the slight reaction set up in the system Where there is a double infection with pneumococci and Friedlander bacilli, the latter generally gain the upper hand in a short time so that the pneumonia runs the course of a bacillus infection. Wherever a pneumonia is slow to resolve and the prognosis seems to be bad despite low temperatures, a bacillus infection must always be suspected and the sputum should be examined.—Muench med. Woch.

Treatment of Suppurating Adenitis with Resorcin.

Fionito states that in army and navy work it is very frequent to find cases of suppurating glands, especially in the groin. In fhese cases it is not desirable to operate in such a way as to place the patient in the hospital with a long period of absence from duty, while a tedious granulation goes on. Most of these suppurations are due to gonorrhea or syphilis. In seeking a means of treatment which allows the patient to remain about, the author tried the use of resorcin, swabbed into the cavity of the abscess after removal of the pus through a small incision. The advantages of this method of treatment are these: the treatment lasts from six to ten days only; the esthetic results are excellent, there being little scarring; the results are of the best in streptococcic infections; the temperature rapidly falls; a large collection of pus does not contraindicate this method of treatment.—Annali di Medicine Navale e Coloniale.

Eczema in Nurslings.

The author used applications of heated air in 35 cases of eczeme in infants, with good results. Most of the cases had already been treated with ointments and zinc oxide pastes without success. Under the hot-air treatment the little patients gained in weight, the itching diminished, and the lesions disappeared in a relatively short time. The treatment was applied for five to ten minutes, once daily, and in the intervals the affected region was covered with olive oil. Strict dietetic measures should be enforced during the treatment.—Perlmann, Munch. med. Wochen.

Calcareous Deposits in Arteries and Glands.

The authors carried out an extensive chemical research on this subject, using fresh specimens obtained from the postmortem room. They found that calcareous degenerations in the aorta and in caseating glands show differing compositions varying with the stage of the process. In the earliest stages there is a large amount of free fat. As the degeneration progresses there is a formation of calcium soaps. The latter gradually break down, the calcium ion combining, instead, with phosphoric acid and carbonic acid radicles to form insoluble deposits of calcium phosphate and carqonate. The small amount of organic matter in the diseased portion is possibly of the nature of purin bases. There is some evidence to show that these changes are the results of deficient oxygenation at the part.—Moore, Joseph, and Williams, Liverpool Medico-Chirurgical Journal.

Epidemic of Icterus in Soriano and Cimino and Its Relation to Pregnancy.

Cova describes an epidemic of 145 cases of icterus in a town with 6000 inhabitants at a high altitude. This epidemic began with a puerperal patient who soon died with symptoms of acute yellow atrophy of the liver. From this case the epidemic spread until many of the inhabitants were attacked. In general the cases were benign and without fever. There were malaise, loss of appetite, and weakness, followed by a moderate degree of icterus. The disease lasted about three weeks. Most of the cases that were fatal were among pregnant women, of whom 23 were attacked. In general there were no bile pigment in the urine and no albumin. The liver was enlarged. Ten pregnant patients died. Abortion resulted in only one case. There were five primiparæ, of whom four died; of thirteen multiparæ only three died; thus the disease was more fatal among primiparæ. During pregnancy there are in the liver changes which are aggravated by this condition. Such epidemics are not rare, and are shown by published accounts to be especially fatal among pregnant women. The other fatal cases are generally those of individuals who have already poisoned their livers with alcohol or syphilis. This epidemic was probably of barterial origin, but the germs could

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not be isolated. The evidence of contagion from one case to another is conclusive.—Folia Gynecologica.

The Insomnia of Alcoholism.

Of all the insomnias the most difficult to control is that of acute alcoholism. Not only is there wakefulness during the period of convalescence from the restless tossing to and fro, remorse and gloomy anticipations of the future. In these cases the more recently discovered hypnotics do not reach the bottom of the trouble. Bromidia has a profound influence on the entire nervous system and exercises its sedative effect thereon before the actual hypnotic result is prolonged. The ultimate result is curative, for the effect on brain and cord does not immediately wear off. Furthermore, far from causing anorexia, as similar agents are prone to do, Bromidia actually increases the appetite, a very valuable help in these cases where it is important to build up the system as soon as possible. In all alcoholic cases, the use of Bromidia is greatly to be preferred to the hypodermic injection of morphine, with its inevitable result of locking up the secretions, and its frequently disastrous action on the stomach. If opium must be used, a dose of Papine will accomplish what is desired without any of the bad effects of morphine.

American Medical Editors' Association.

The Annual Meeting of the Society will be held at Atlantic City, New Jersey, on June 1st and 3rd with headquarters at the Marlborough-Blenheim Hoter.

Dr. Thomas L. Stedman, Editor of the Medical Record will preside and an attractive programme is being prepared.

The Annual Banquet will be held on the Evening of June 3rd. Every Editor and those associated in Medical Journalistic work will find this meeting worth attending.

Action of Tropical Sun and Animals.—Aron in the Philippin Medical Journal says that under climatic conditions, even during the cooler seasons of the year in Manila, animals such as rabbits and monkeys which by nature have only a limited power of physical heat regulation, or animals the physical heat regulation of which is artificially inhibited (tracheotomized dogs) die if exposed to the sun, the body temperature rising to febrile heights. If the same animals are protected from the rays of the sun, or if the increase of heat due to radiation from the sun is compensated by an increased by an increased loss, auch as would be brought about by a strong wind, then the animals suffer no discomfort. Insolution of the skull alone is without effect if the body temperature is kept within normal limits. The post mortem findings on the animals dying as a result of insolation show decided haemorrhagic lesions of the menings in the brain, and in monkeys in the heart. In animals without sweat glands the subcutaneous tissues are heated by the radiated heat from the sun to temperatures about those compatible with life. The human skin if exposed to the sun is warmed to about 3° or 4° C. above the normal skin temperature (from 32°. 5 to 33°.5C.). An increase, even to the normal body temperature, is prevented by evaporation of sweat. The cooling effect of the sweat secretion causes a fall of the skin temperature, even if insolution is continued during longer period. The brown skin of Malay,s while theoretically absorbing more heat in the sun, shows a smaller rise in temperature in the tropical sun than the skin of white men under similal conditions. As an explanation, it is believed that an earlier and better water evaporation by sweat secretion takes place. The air in the human hair: especially in black hair, under the influence of the tropical sun, with life. It is demonstrated that in the tropical sun a man with a corored skin is in a better position as regards heat regulation than is a man with a white skin. Types of apparatus suitable for testing temperatures thermoelectrically are described. The monkey, whose home is in the Tropics, withstands the sun less readily than any other animals observed, including even the white man. Of course, the monkey does not live in the fields; his home is in the forest, into which only a small proportion of the direct rays of the sun enter. He instructively avoids exposing himself to the sun for more than a few minutes. The same is true of the native of the Tropics, if he is left to his own customs. Even if he is otherwise nearly naked, he often wears a large hatlike arrangements which shades not only his head but his body.

Appendicitis and Colitis.—Toelken (Deut. med. Wochensch) believes that the diagnosis of acute appendicitis in the early stage is still a difficult matter. Sonnenburg relies upon blood examinations to distinguish between appendicitis and intestinal catarrhs, and considers castor oil not only as a curative remedy in some cases, but as an aid diagnosis. Inflammatory conditions of the adnexa are found to be present in at least one-third of the women admitted to Sonnenburg's division of the Moabit Hospital of Berlin. Acute gastroenteritis with diffuse colicky pains over the entire abdomen, especially tenderness in ileocecal region, due perhaps to the participation of the appendix in the general catarrh, may be confounded with appendicitis. Such cases are proably often regarded as appendicitis cures without operation. In Sonnenburg's clinic, from April 1, 1907, to January 1, 1911, 462 cases of acute appendicitis have been treated with castor oil with rapid improvement, without operation, and with not a single death. In 23 other cases no relief occurred and immediate operation was resorted to, also without a fatality. Where an attack is of slight character, but not the first, operation is done at an early period, since the fact of recurrence shows that there is a mechanical obstruction which demands removal. To obtain some information regarding the later results in the cases treated with castor oil, letters of inquiry were sent to 193 patients and answers received from 96. Of these 7 had recurrences, 16 had been operated upon at a later period, and 14 still suffered from occasional disturbances. in 62, that is 65 per cent., there had been no return of the disease.

Women-Doctors in Germany.

Some interesting figures abuot the medical profession in Germany have emerged from the statistics of the census of 1910. The total number is 32,449, not so, very many more than the total for Great Britain if the estimates are correct upon which the contentions about the National Insurance Act are based. In Britain, however, the number of registered doctors increases nowadays very slowly, Whereas in Germany it seems as if that increase is more rapid; so possibly in a few years the profession there will be as much overcrowded as it is here. Thus the number of medical students in Germany was nearly 2,000 greater in 1910 than in the preceding year. Women-physicians are also rapidly becoming more numerous; in 1908 there were only 55, in 1909 there were 69. and in 1910 there were 102—nearly twice as many as two years previously. Moreover the number of women-students is increasing by leaps and bounds, and bears a much larger proportion to that of the male students than in the case of the already qualified. Still it cannot be said that Germany is over-doctored as yet.—The London Hospital Journal.

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The Feeding of Babies with Undiluted Citrated Milk.

H. C. Mann (Guy's Hospital Gazette) gives an interesting account of his experience of the routine feeding of infants on citrated whole-milk, which he has practiced for the past three years. During this period some 400 cases requiring directions in feeding have passed through his hands, and in only half a dozen instances has he been obliged to adopt any modification of the whole-milk regime. Such an experience is a strong testimony to the value of this method of artificial feeding, a method which, owing to its simplicity and cleanliness, is conspicuously suited to hospital practice. Dr. Mann proceeds to give the weight records in eighty-nine cases, in each of which there had been loss of weight on other diets. Throughout his work the author has made use of sodium citrate in the proportion of one grain of the drug to each ounce of undiluted milk—half the dose, that is to say, that has been employed by most who have made use of citrated milk, whether whole or diluted, In stating that he knows of "no other published series of cases in which undiluted milk has been universally employed," the author has overlooked Dr. F. S. Langmead's paper in vol. iii of the Proc. Roy. Soc. Med. on "eighty consecutive cases of wasting infants fed on undiluted citrated milk" vide British Journal of Children's Diseases, 1910, vii, p. 219). Dr. Langmead, who, we believe, was the first to point out the value of citrated whole-milk in infant feeding, published his first paper in March, 1908.—British Journal of Children's Diseases.

Obstetrical Problems.

Routh states that the mortality both in utero and soon after birth is still far larger than it should be. The accoucheur is responsible for the newborn child, during at all events the first fortnight of life, and in that period nearly one-third of those children who do not survive their first year lose their lives. Progress in the knowledge of the physiology of menstruation, labor, and lactation, and of the causation of the toxic diseases of pregnancy and the puerperium, will not be possible without the aid of the physiological chemist. Obstetricians are still ignorant of the biochemical changes in the blood which influence the cylical functions of menstruation and ovulation, or which have to do with the implantation of the fertilized ovum and the onset of labor and lactation. Little is known also of the autotoxæmias lying at the basis of pernicious vomiting, puerperal albuminuria, eclampsia, chorea gravidarum, and puerperal insanity. The blood serum of pregnant women hinders the proteolytic ferments, as trypsin, while placental serum has a marked power in destroying cancer cells. Excess of lutein tissue is associated with hydatidiform degeneration of the chorion, while destruction of the lutein tissue prevents implantation of the ovum.—The London Lancet.

Radiotherapy and the Artificial Menopause in the Treatment of Fibromata and Hemorrhages at the Menopause.

Oudin and Zimmern claim that in radiotherapy we have an efficient method of control for the hemorrhages of the menopause, whether they result from sclerosis, congestion, or fibromata. The rays used after a few applications affect the Graafian follicles and cause atrophy, while leaving the internal secretion intact. A premature menopause natural in type is created, and the mucopurulent discharge and edema of the legs and feet are relieved along with the hemorrhages. In the case of young and small fibromata the size of the growth is reduced from one-third to one-half. In older and larger fibromata and in the subserous type the action is not so good. There is no tendency to obesity caused by the treatment. The effects are not so good in cases under the menopause age as in those of women having fibromata at that period. —Journal de Medicine de Paris.

The Administration of Chloroform in the Upright Position.

The opinion has long been held, not only by general medical practitioners but also by professional anæsthetists, that it is not altogether a safe procedure to administer chloroform with the patient sitting upright. That this view would appear to be the correct one seems to have gained a certain amount of support from the fact that fatalities have several times been reported as occurring after such administration, usually in dental cases. In a paper recently read before the Harveian Society by Mr. John H. Chaldecott, which we publish in another column, a plea is made for a reconsideration of the whole matter, and if the arguments contained therein are carefully followed, we think that most will agree that the author has succeeded in establishing his points. At any rate, he has had no fatalities, nor has he witnessed the occurrence of any dangerous symptom in a series of 1,400 administrations. As to the relative safety of the upright as compared with the recumbent position, Dr. Chaldecott has no hesitation in preferring it for nose and throat operations, while it is certainly more convenient for the surgeon. One rather remarkable feature of the cases, which has not yet been explained, is that vomiting rarely occurs, or is only slight, and the general after-effects are much less when this method is adopted. It is essential in this, as in other modes of administering anæsthetics, that the anæsthetist should thoroughly understand the technique and that he should be prepared to act as an assistant if required. There appear to be no contra-indications to the upright posture, nor is there any special type of patient for whom the method is unsuitable.—Medical Press and Circular, London.

A Dependable Anodyne.

The uses of Papine are almost unlimited. In the main they are, however, diarrheal affections such as gastro-enteritis, cholera morbus and infantum dysentery; diseases of the nervous system attended with pain, such as neuralgia, neuritis, hysteria and locomotor ataxia; painful disorders of the utero-ovarian tract, as dysmenorrhea, uterine colic, ovarian neuralgia; and also other conditions attended with severe pain, such as biliary and renal colic, and the chest pains of pleurisy, pneumonia and tuberculosis. Papine has also been strongly recommended in the treatment of diabetes. This product has the great advantage that it can be used without locking up the secretions or inducing a habit, as is the unfortunate case with other opium preparations.

The Value of an Effective Alterative in Neurasthenia.

Nine-tenths of the cases of neurasthenia which present themselves are due to a blocking of the system with products of mal-assimilation. It is not so much a tonic and stimulant regime that these cases demand, although that is useful later on, as a course of treatment designed to wake up their lazy emunctories. Bowels, kidneys, liver, sweat glands, all require stimulation and Iodia is *par excellence* the remedy to produce this result. This sort of treatment will produce a feeling of exhilaration and renewed vigor in the patient more quickly than any regime based on strychnine or overfeeding.

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Rheumatic and gouty patients are greatly benefited by the administration of Ecthol in combination with salicylates. Its use prevents complications and lessens the liability to recurrences. The application of a mixture of equal parts of Ecthol and oil of wintergreen to the affected joints several times daily, materially relieves the pain and swelling and assists the internal treatment.

Relationship of Tuberculosis to Accident and Injury.

Bosanquet states that this subject has acquired considerable importance within recent years in view of the enactment of employers' liability and workmen's compensation laws. The important facts to be considered in this connection are the possibility (1) that an accident or other injury may be the means by which tubercle bacilli are introduced into a person; or (2) that the injury may cause a weakening of natural resistance to the bacillus and thus permit it to establish itself when it would not otherwise have done so, or may lead to dissemination of the bacilli, thus giving rise either to a new focus of tuberculosis or to extension of one already existing. There are certain peculiarities about the tubercle bacillus which render the problem of the relatianship between an injury and a subsequent tuberculous infection specially difficult to determine. In the first place the microorganism is fairly ubiquitous. Secondly, the tubercle bacillus is a slowly growing organism in the majority of instances, so that symptoms of disease do not arise until some considerable period of time has clapsed after its actual introduction into the body or its establishment in some new focus. Accidental injury may cause a direct infection with tubercle bacilli, as in the case of the nurse who cut herself with a fragment of a broken spittoon which had contained tuberculous sputum. Butchers are liable to inoculation from cutting up infected cattle. The condition known as "anatomical tubercle" is a form of slowly developing verrucose tuberculosis of the skin which at one time was not uncommonly found among pathologists. It may be alleged that injury may cause the extension of an existing tuberculosis owing to a weakened resistance or to the dissemination of bacilli. Tuberculous disease of the joints should be considered in a class by itself. There is a considerable mass of evidence that in some way or other injury does lead to tuberculous arthritis; and if the occurrence of the accident is clearly established and it is followed at a reasonable interval by the tuberculosis one may accept the causal connection as probable. As to what constitutes a reasonable period of time opinions may differ, but it seems unlikely that symptoms would be delayed for more than three modths. Also one must look for some sign that recovery has never been perfect—some persistence of pain or stiffness in the joint in the interval. Cases have been reported of pulmonary tuberculosis resulting from severe traumatism to the thorax, but in these cases there was probably a latent tuberculosis before the accident which served to quicken into aotivity the disease process. If the onset of a case of pulmonary disease were attributed to an injury one would be obliged to regard the assumption with grave doubt, since the sequence is undoubtedly rare and its very existence may be doubted. It is well established that injury may cause aggravation of an existing tuberculosis. It is only when the injury affects the tuberculous part directly that one can admit without scruple that subsequent increase of the disease is due to it. Before it could be admitted that an accident had aggravated an existing focas of tuberculosis situated at a distance from the part affected by the injury it would in any case be necessary to show that it was of such gravity as to produce a elear deterioration of general health.—The Lancet, London.

PEPSIN is undoubtedly one of the most valuable digestivs agents of our Materia Medica, provided a good article is used. "Robinson's Lime Juice and Pepsin" (see page XIV this number) we can recommend as possessing merit of high order.

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Dr. Fred Brush has resigned the Superintendency of the New York Post Graduate Medical School and Hospital, to become Superintendent of the Burke Relief foundation, and engage in the planing and organization of the Convalascent Hospital, to be erected at White Plains, N. Y., on the sixty acre plot of land recently purchased. McKim, Neah aud White are the Arichitects, and a new type of institution and work for the care of the city's sick will be established.

Battle and Co. have just issued No. 18 of the Dislocation Charts which completes the set. They will be sent free to Physicians on request. Also Fracture and Tumor charts if desired.

Spread of Infection from Tuberculous Cervical Glands.

A. L. Turner states that as to the manner in which the tubercle bacilli pass from the cervical glands to the lungs two explanations have been offered; first, by way of the deep efferent cervical lymph vessels discharging into the thoracic duct upon the left side of the neck, and on the right side through the right lymphatic duct into the large veins, thence by the right side of the heart and pulmonary artery to the lungs; secondly, by an extension of the inflammatory process from the diseased inferior deep cervical glands directly to the pleura and apex of the lung. Experimental evidence has been brought forward in support of the extension of the tuberculous disease by the first or anatomical pathway, but the author has failed to bring forward pathological post-mortem data in support of direct extension from the cervical glands to the apex of the lung.—Edinburgh Medical Journal.

Sclerosis of the Rectouterovesical Fascia.

J. Oliver states that this is a disorder of some importance, since it is commonly a cause of infertility and even of sterility, as well as a not infrequent cause of dyspareunia. It resembles Dupuytren's contraction of the palmar fascia. Sometimes the fascia is more or less thickened and contracted merely, but often it presents nodulations. It is not an inflammatory change, and it seldom, if ever, involves the mucous membrane of the vagina. The fibrous tissue causing the contraction is a very coherent fibrillar tissue like tendon tissue. It is not dependent upon any traumatic influence, but is probably due to some bacterial product absorbed from the vaginal canal and circulating in the blood. It is a derangement which may appear at any time during the reproductive life of the woman after the age of twenty-one.—Edinburgh Medical Journal.

The Jackson County Medical Society at the first of its three annual meetings at Jefferson, Ga., elected the following officers for the ensuing six months: President, Dr. Lactus Sanders, of Commerce; vice-president, Dr. E. M. McDonald, of Jefferson; secretary-treasurer, Dr. J. C. Bennett, of Jefferson.

Greater New York Number.

In June the American Journal of Surgery will issue a number composed of original contributions from men of recognized prominence in the medical profession residing in Greater New York. Among those to contribute are:

Herman J. Boldt, C. N. Dowd, Meddaugh Dunning, Wm. S. Gottheil, E. L. Keys. Jr., Howard Lilienthal, Chas. H. May, Willy Meyer, Robt. T. Morris, S. Lewis Pilcher, John O. Polak, James P. Tuttle, James P. Warbasse and others.

Contributions from these well known men should make this issue of particular interest and value.

The Bookman for April, 1912.

CHRONICLE AND COMMENT.

Pointed Paragraphs on Timely Matters of Literature and Life.

SPECIAL ARTICLES.

Lady Thackeray Ritchie (illustrated). By Lewis Melville.

Millions and Millionaires in Fiction. By Edna Kenton.

Elihu Tedder—Recollections and Impressions (illustrated). By Horace Thompson Carpenter.

A Panel of Poets. By Milton Bronner.

The Author and Publicity. By Arthur M. Chase.

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George Borrow (illustrated). By Philip G. Hubert, Jr.

The Posthumous Works of Tolstoy. By Abraham Cahan.

THE DECORATIVE DRAMA.

Summurun—The Bird of Paradise—The Talker—Lydia Gilmore—A Slice of Life—Lady Patricia—Preserving Mr. Panmure—Officer 666—The Greyhound—Oliver Twist. By Clayton Hamilton.

The Antagonists: A Novel; Chapters I, II, III. E. Temple Thurston.

THE RECORDING ANGEL AND SOME RECENT NOVELS.

To M. L. G.—The Green Vase—A Painter of Souls—Sekhet—The Heart of Us—The Plain Path. By Frederic Taber Cooper.

BOOKS OF THE MONTH.

Reviews of Important New Books by Paul Grier Harding, Walter Clayton, Graham Berry, Algernon Tassin, and Hildegarde Hawthorne.

VERSE.

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The Silent Warrior. By Herbert Heron.

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Surgeon W. R. McKinley, Fourth Vice-President, Columbus, Miss.

Surgeon Geo. Ross, Historian, Richmond, Va.

Surgeon J. U. Ray, Secretary-Treasurer, Woodstock, Ala.

PRELIMINARY PROGRAMME.

Any Surgeon having a case of interest is requested to report same; and any who have not sent in the titles of their papers are requested *to do so at once*, as it requires considerable time and work to arrange the final programme.

The following titles have been received:

"Wright's Solution in Sloughing Wounds," Surgeon H. A. Royster, Raleigh, N. C.

"Report of a Case: Compound Dislocation of the Ankle," Surgeon R. J. Noble, Selma, N. C.

"Dislocation of the Ankle Joint," Surgeon C. D. O'Hara, Williamstown, Ky.

"The Sacro-Iliac Joint and its Injuries," Surgeon R. L. Payne, Sr., Norfolk, Va.

"Malingering," Surgeon C. H. Davis, Knoxville, Tenn.

"Treatment of Delayed Bony Union," Surgeon C. L. Guice, Gadsden, Ala.

"Report of Some Unusual Surgical Cases," Surgeon W. B. Hardeman, Commerce, Ga.

"Report of Case: Extensive Injury to Both Lids and Eye Ball with Good Recovery," Surgeon J. L. Minor, Memphis, Tenn.

"Emergency Surgery," Surgeon E. P.

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"Organization: Each Surgeon as a Factor," Surgeon F. A. Webb, Calvert, Ala,

"Injuries to the Elbow Joint," Surgeon H, P. Cole, Mobile, Ala.

"Operative Treatment to Injuries of Elbow Joint," Surgeon S. R. Miller, Knoxville, Tenn.

The management of the Southern Railway and allied lines are interested in the success of this Association and desire that the Local Surgeons show their interest in the work by attending the annual meetings and reading and discussing papers and reporting cases that are of interest and mutual benefit to the Surgeons and the Railway Company.

If you will read a paper or report a case send me title of same on receipt of this announcement.

The New Willard Hotel will be the meeting place.

The following resolution was adopted at the 1909 meeting:

"Resolved; That each member file with the Secretary his autograph and photograph before next annual session, to be permanently kept and exhibited at each annual session."

Only about half of the membership have complied with this resolution and I hope the balance will "smile and look pleasant" and send me a copy at once.

A few of the members have overlooked paying their dues for 1911. I have plenty of blank receipts and will be glad to fill them out on the receipt of $2.00 from the delinquents.

At the last session of the Association the annual dues were raised from $2.00 to $3.00 per year beginning with 1912. Those delinquent for 1911 can send me $5.00 and I will mail them receipt for both years. *Easy.*

There will be a great deal to interest the Surgeons at the coming meeting, and if you do not want to wait at the Secretary's desk for your 1912 receipt send me $3.00 now and I will mail you your receipt.

The steady improvement of each meeting over the previous one will be evident at this meeting and it is of importance that each member of the Association be present, and by his presence and work, assist in the success of the session.

I hope that nothing will occur to prevent your attending.

J. U. RAY,
Secretary and Treasurer.

Dystocia Due to Echinococcus of the Female Pelvic Organs.

Bertino finds from statistics of the occurrence of echinococcus cysts in 2,785 cases that this complication is more frequent in women than in men, and that of the cases occurring in the pelvic organs more are found in women. They may occur in any part of the female genital organs; pararectal, paravaginal, paracervical, and paravesical, while they may invade the bones of the sacrum, the uterus, tubes, and ovaries. The effect of pregnancy and labor is bad. The increased blood supply of pregnancy causes the cysts to develop rapidly; when labor comes on they produce an obstacle to delivery, which has to be surmounted by an obstetrical operation. In some cases rupture of the cysts occurs during labor, allowing of the delivery of a living child. Out of 39 cases of pelvic cysts collected by the author 27 recovered and 11 died; of the children 16 were born alive and 19 dead (2 not recorded). The deaths in the mothers were from sepsis, rupture of the uterus, exhaustion, etc. When such a complication is diagnosed before labor operation should at once be performed to relieve the woman of the tumor.—Annali di Ostetricia e Ginecologia.

Etiology of Ovarian Dermoid Cysts and Considerations on the Contained Hairs.—Yamasaki (Monats. schr. f. Geb. u. Gyn.) says that from 1902 to 1909, 203 cases of ovarian tumors were operated on in the clinic of the university at Kumamato, Japan. Out of these there were seventy-one dermoids and 132 other tumors. Of 241 extirpated ovarian tumors 84 were dermoids, that is 34.85 per cent. This is a considerably larger proportion of dermoids than is given in any other statistics published up to date; in fact it is double most reported statistics. The age of the patients is from a few months to sixty years, the majority being between twenty and thirty years of age. Sneguireff maintains that in such cases there is an increased fruitfulness of the mother. Pfannenstiel thinks it untenable that there is any hereditary element in this species of tumor. Dr. Freund thinks that infantile uterus is often found in connection with these tumors. This condition is more frequent in the right than the left ovary. The tumor is bilateral in about 8 per cent. of cases. These tumors generally contain hair, and this may be of any color from white to black. The color of the patient's hair bears no relation to the color of that faund in the cyst. The hair of Japanese women is black, but blonde and white hairs were found in the tumors observed. The hairs are from a few millimeters to some feet in length, and they may be rolled up in snarls, single, or in bunches.

Dr. George H. Mallett has been appointed Gynæcologist to the General Memorial Hospital of New York City.

Notwithstanding the large number of Hypophosphites on the market, it is quite difficult to obtain a uniform and reliable Syrup. "Robinson's" is a highly elegant preparation, and possesses an advantage over some others, in that it holds the various salts, including iron, quinine and strychnine, etc., in perfect solution, and is not liable to the formation of fungus growths. (See page xiv this issue.)

The CHARLOTTE SANATORIUM

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The Main Building Front View.

The attention of the physicians and surgeons is called to the advantages which this institution offers in methods of laboratory diagnoses.

Many physicians through lack of time, technical training or laboratory equipment find it difficult to utilize the many methods of microscopic and clinical examinations so essential to a proper diagnosis.

To the physicians and surgeons of the Carolinas and Virginia, the Charlotte Sanatorium Laboratory offers, at moderate cost, facilities for such examinations. Animal inocculation, chemical, bacteriological and histological examinations will be made as the case requires.

The following directions are suggested for the benefit of those who may forward material for examination.

All specimens should be accompanied by a brief note descriptive of the clinical condition and a special reference to the character of the examination desired.

Seventh Street Entrance.

The name and address of the person to whom the report is to be sent should be clearly indicated.

Sputum—should be sent in a clean, wide-mouthed bottle. The ordinary vaseline bottle answers all purposes. The morning sputum is preferable. That expectorated during meal time should not be included.

Blood For Widal Test. — After carefully washing, prick the lobule of the ear or the tip of the finger. The first drop of blood should be wiped away. Two large drops are then placed on a glass slide, one near either end, and allowed to dry without being spread out on the suface of the slide. After they have dried, the

slide is carefully placed in a clean envelope and box, and then mailed to the laboratory.

Second Method.—Collect three or four drops of blood in a capillary tube; then seal tube over gas or other flame and send to the laboratory. (Capillary tubes will be sent upon application to the laboratory.) Blood for malarial parasites differential count. etc., should be sent to the labaratory on glass slides. As thin a smear as possible should be made.

Smears For The Detection of Gonococci.—One drop of purulent discharge from the urethra should be placed at one end of a clean slide and a thin smear made overthe surface of the slide.

Clinical Laboratory, Showing Arrangement of Desks, Miscroscopes, Microtomes, Incubator, Centrifuge, Etc

In collecting a specimenf rom a female patient,care should be taken to obtain the drop of material directly from the seat of the discharge. This should be done with a sterile swab or other instrument. Two smears should always be sent to the laboratory.

Urine.—for bacteriolicalexamination should always be catheterized directly into a bottle that has been rendered sterile by boiling 15-20 minutes. No chloroform or other preservative should be added. When sending a specimen of urine to the laboratory, always mark it with the date, the name of the patient and of the physician for identification, and specify whether a chemical or bacteriological examination, or whether Ehrlic 's diazo test for typhoid fever is desired. The quantity should not be less than four ounces.

Clinical Laboratory, Showing Autoclave, Hood, Operating Tables, Etc.

Pathological—material from either operation or autopsy should be wrapped in gauze moistened with salt solution surrounded by oiledpaper or rubber protective. When it is not possible for material to reach the laboratory within twenty-four hours it should be placed in alcohol (80 per cent) or formalin solution (10 per cent.) Small fragments of tissue and thematerial from uterine curettage should be preserved always.

Tumors.—can be sent by mailing in wide mouthed specimen jars. They should rest upon a pad of absorbent cotton, which is placed in thebottom of the jar before

the tumoris dropped in.

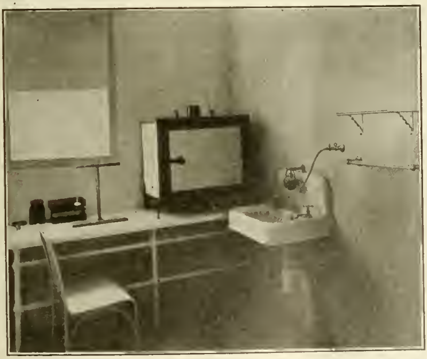
Feces.—should be sent in a clean, wide mouthed bottle. A large sterilized screw capped bottle will answer the purpose.

Wassermann's Test.—Since the advent of the discovery of 606 for the cure of Syphilis. the employment of the Wasserman test, both before and after its use, is conceded by all scientific investigators to be of the highest importance as a control to the curative effect of this remedy. The Charlotte Sanatorium Laboratory is specially equipped for carrying out this Wasserman Sero-diagnosis test for Syphilis.

(Clinical Laboratory, Showing Supplies, Working Table. Etc.)

Specimens sent to the laboratory for this test should be obtained as follows.

1st. By using an ordinary antitoxin syringe, and withdrawing the blood directly from the median basilic vein, as represented in Fig. 1 illustrates tourinquet applied, taken the blood from the vein by means of the syringe


Clinical Laboratory, With Hot Air Sterilizer, Scales, Lavatory, Etc.

2nd. By means of capillary attraction, as illustrated in Fig. 11 represents empty capsule; tourinquet applied to finger. It is best to apply constriction to middle finger, and puncture the dorsal surface of the last joint of this finger rather close to nail with a sterile, and collect blood, as illustrated in Fig. 11.

After obtaining blood if capsule is used, as is shown in Fig. 11, simply place the curved end over a flame of a Bunsen Burner, alcohol lamp, or ordinary gas jet to seal same, and mail. If syringe or other means are employed, put blood in small test tude, allow to coagulate, cork, pack and mail as any other fraigle package. Atleast two C. C. should be withdrawn for this test. The syringe tubes, etc., should be clean and perfectly dry. It is the best, if possible, for patient to go to the laboratory and have the director of that department secure for himself the specimen of blood.

Milk.—The bacteriological examination of milk, requires certain precautions in the collection of the sample. Special instructions and proper containers will be sent upon application.

Stomach Contents.—should be sentin a sterilized bottle. Alarge vaseline or quinine bottle usually answers the purpose.

Fig I

Fig II.

The following table gives the cost of many of the examinations made in this laboratory:

Smears and Stains (tubercle bacillus,) gonococci, etc.	$1.00
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Leucocytes	1.00
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Malarial parasites	1.00
Complete analysis	3.00
Urine.	
Chemical	1.00
Microscopical	1.00
Complete analysis	1.50
Pathological Sections	5 00
Feces Examination	2 00
Blood Culture	5.00
Cultures and isolation of bacteria	5.00
Stomach Contents	2.00
Widal Test	2.50
Tissue Sections	5.00
Tuberculin Test	5.00
Wassermann's Test	10.00
Milk.	
Chemical	2.50
Bacterial	5:00
Water analysis, bacterial examination	5.00
Chemical examination including alkalimity, chlorides, ammonia, nitrites and nitrates	5.00
Quantitative analysis	$10.00 to 25.00
Culture Media (per tube)	.25
Sterilized tubes and pipettes	.15
Coagulation time	2.50
Vaccines	10.00

Sterilized Tubes with swab ....50 Bacterial Cultures 1.00 Sterilized solution.. 5.00 Spinal Puncture and Analysis 5.00

Address all specimen to the Charlotte Sanatorium Laboratory, Charlotte, N, C.

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Hereditary Cleido-Cranial Dysostosis.

Mouchet (Paris med.) records three examples, in a mother and her daughter and son, and gives a general account of the disease. Historically he states that absence —total or partial—of the clavicles had been noted as a rare abnormality by many anatomists in the past, but that the association with the cranial defect was first pointed out by P. Marie; he has therefore overlooked Sir T. Barlow's description of this association as far back as 1883 (Brit. Med. Journ., 1883, 1, p. 909). To the three recognized features of the condition, namely, partial or complete aplasia of the clavicles, the cranial malformation, and the hereditary character, he adds anomalies of the teeth which are almost constant. The first dentition is delayed and often persists to the twelfth year; some teeth, especially the upper incisors, are absent. Caries appears early and progresses rapidly, and the teeth are small, irregular, and badly embedded. The vault of the palate is nearly always high, and is sometimes cleft in the median line. Incomplete forms may occur. Although the deformity is seldom seen in more than two generations, it is usually more fully developed in the second than in the first generation.—British Journal of Children's Diseases.

The Radical Cure of Inguinal Hernia in Children.

Turner described the following method which he had used in twenty-five cases:

The external oblique aponeurosis is exposed by a short incision above Poupart's ligament external to the external abdominal ring. An incision ½ inch long is made through the aponeurosis just above the middle of Poupart's ligament. The internal oblique thus exposed is drawn upwards and outwards bringing into view the cord covered by the cremaster just below the internal abdominal ring. After the cremaster has been torn through a blunt dissector is insinuated under the cord and sac, which are drawn through the small incision in the external oblique. The cord is spread out, when the edge of the sac is readily seen and easily separated. It is isolated as far as the internal ring and then drawn upwards and readily shelled out from the lower part of the cord. When completely isolated it is ligatured and removed. The cord is then pushed back into the canal, the internal oblique falls back into position, and the small incision in the external oblique is closed by a few catgut sutures.

The advantages of ihis operation are:

(1) it is easier to separate the sac just below the internal ring for it is less adher-

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ent there to the coverings and constituents of the cord than at or below the external ring. The spermatic vessels are thus less likely to be injured and a post-operative haematoma is improbable. Communication between the sac and tunica vaginalis presents no difficulty, for the testicle is easily drawn up into the lower angle of the wound.

(2) The minimum amount of damage is sustained by the inguinal canal. The small incision in the external oblique scarcely opens this structure for it is above the internal ring. Suture of the small wound in the aponeurosis is easy. When the whole canal has been opened up suture in the region of the external ring often presents difficulties. The method can be carried out equally easy in children of all ages and is advocated as a simple way of effecting the essential point of a radical cure, viz., complete removal of the sac with the least possible interference with the inguinal canal and the spermatic cord.—British Journal of Children's Diseases.

A New Thyroid Preparation.

To Dr. S. P. Beebe, Ph.D., Professor of Experimental Therapeutics in Cornell University Medical School, the profession is indebted for a new and valuable preparation of the active principle of the thyroid gland. It is a carefully standardized product, consisting of certain proteids of normal glands, extracted, purified and adjusted to a content of 0.33 per cent. of iodine. Its preparation has been entrusted to Messrs. Parke, Davis & Co., and the product is offered to the medical profession under the name of Thyroprotein (Beebe).

The selection of normal glands for use in making Thyroprotein, it may be noted, is a very important matter. Heretofore the glands of sheep have been used in medicine, and it is now known that sheep from certain parts of the country always have goitrous glands which are rich in content of proteid of the thyroglobulin type but contain very little iodine. This fact alone accounts for much of the variation noted in thyroid therapy. Furthermore, the thyroid gland as a whole contains certain substances which appear to be not only useless but actually harmful. In the preparation of Thyroprotein these objectionable substances are rejected.

For therapeutic administration the proteid (thyroprotein) is diluted with milk sugar and made into tablets, each of which weighs exactly two grains. These tablets are supplied in three strengths, containing, respectively, 1 per cent., 2 per cent. and 5 per cent. (of 2 grains) of the active medicament. The 1 per cent. and 2 per cent. tablets are used almost entirely in the treatment of goitre. The stronger (5 per cent.) tablets are employed in metabolic disorders, as skin lesions, joint affections, myxedema, cretinism, or other conditions in which there is markedly deficient thyroid activity.

Physicians who are desirous of learning more of this new thyroid preparation will do well to send a request to the manufacturers, Parke, Davis & Co., at their home offices in Detroit or any of their branch houses, for their new booklet descriptive of the product. It bears the title "Thyroid Therapy" and contains a lot of useful information.

Progressive Paralysis and the Reaction of the Pupils.

Freund saw twenty cases of progressive paralysis in two hundred cases of sickness, among persons insured against total disability. This ratio is greater than the usual ratio of paresis and is explained by the greater prevalence of this disease among the intellectual classes that take advantage of such insurance. Paresis is of great importance from the standpoint of insurance because of its frequent appearance in otherwise healthy persons and the few diagnostic signs it may show in its incipiency. Care should be taken to look for a history of syphilis followed by neurasthenic symptoms. Convulsions, temporary hemiplegia, even frequent vertigo should be looked on with suspicion, once syphilis and neurasthenia coexist in an applicant. The pupillary phenomena are of the greatest importance, for they often precede other signs of disease by several years. Difference in the size of pupils is of greater importance than simply contracted pupils, for the latter occur in health. Of course, care must be taken to have equal illumination of both eyes in looking for this sign.

Still more important is the Argyll Robertson pupil, which occurs in two-thirds of all caser of general paralysis. Several sources of error must be here estimated. The patient's eyes should not be exposed to strong light just before looking for the Argyll-Robertson phenomenon; he should stand with his back to the window or in a dark portion of the room. The difference between illuminating the pupils and leaving them in the natural light should be considerable, for miotic pupils especially may show very slight contraction only on small degree of illumination. Consensual reflex must be guarded against by covering the eye that is not being tested. Sluggish reaction should call for an examination in a darkened room with artificial light and a convex lens. The patient should direct his gaze at the distance so that accommodation

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may not simulate contraction to light. Sluggish reaction is suspicious not because of the degree of contraction but of the promptness of its appearance and the quickness of the contraction. The Wassermann reaction should be made use of in doubtful cases, and it is to be hoped that insurance examiners will avail themselves of it to a greater degree than is done at present.—Blatter fur Vertrauensarzte der Lebensversicherung.

Danger Due to Substitution.

Hardly another of all the preparations in existence offers a wider scope to imposition under the plea of "just as good" than the scientifically standardized Eucalyptol.

The most recent fraud practiced in regard to this product is an attempt to profit by the renown of Sander & Sons. In order to foist upon the unwary a crude oil, that had proved injurious upon application, the firm name of Sander & Sons is illicitly appropriated, the make-up of their goods imitated, and finally the medical reports commenting on the merits of their excellent preparation are made use of to give the desired lustre to the intended deceit.

This fraud, which was exposed at an action tried before the Supreme court of Victoria at Melbourne, and others reported before in the medical literature, show that every physican should see that his patient gets exactly what he prescribed. No "just as good" allowed.

The Serum Treatment of Cerebrospinal Meningitis.

A. Papapanagiotu describes his results in the treatment of fourteen cases of cerebrospinal meningitis in private practice with the anti meningococcus serum. The patients, from the ages of eight months to ten years, all recovered. It is unusual for children undes one year of age to reastonishing. The cases all occurred in the winter months and all were treated at their homes. The author believes that the patients themselves as soon as they are isolated became comparatively harmless, since no two cases occurred in the same family. The attendants of the patient are to harbor the meningococci in the nasopharynx and to become dangerous carriers of the disease The injections of the serum should be given as early as possible in order to get the best results, and may need to be repeated three to four times. The amount given should be 30 c. c. after the age of two years and 10 to 20 c. c. in younger children. The fever at once subsides and all the general symptoms are relieved. The best evidence of the improvement is seen in the fact that the cerebrospinal fluid becomes less turpid. —Archives de Medecine des Enfants.

The Pathogenesis of Icterus.

Leuret and Gauvenet believe that the true question with regard to this subject is whether there are two different kinds of jaundice, one due to resorption into the blood of hepatic pigments and the other due to retention of pigments in the blood elaborated elsewhere than in the liver. The authors have devised a method for the study of icterus for which they claim some originality. They have compared with the aid of a color scale the blood serum, urine, and feces of icterus patients with reference to this pigmentary content. They conclude that all icterus by hemolysis is acholuric and all acholuric icterus is the result of hemolysis. Reciprocally choluric icterus is not hemolytic and is caused by a retention of pigments elaborated by the liver. The authors note the importance of the elimination of bile by the intestine. They have shown that there is a variety of icterus resulting from the formation by hemolysis of pigments which differ from bilirubin elaborated by the liver cells. This icterus is acholuric on account of the quality of the pigments, which are not eliminated by the urine. Other types of icterus arise from the retention of bile derived from the liver cells. —Gazette Hebdomadaire des Sciences Medicales.

The Suprarenal Capsules in Erysipelas.

Lesne, Gerard, and Francon cite the histories of seven cases of erysipelas to show that suprarenal insufficiency is present with fatal results in some cases. A resume of these cases shows that this condition of insufficiency is present after convalescence has been established. The general condition becomes worse, with manifest asthenia and lowered arterial tension, and death rapidly ensues. The cardiac dullness is found to be increased; the liver is increased in volume; there may be vomiting or diarrhea, and pronounced dyspnea. The condition is analgous to what occurs in severe cases of diphtheria. The hypotension is due to suprarenal insufficiency, the tone of the blood vessels being no longer maintained. The end occurs with cardiac collapse. At autopsy the following changes are found in the suprarenal capsules: these are infiltration with uninuclear leucocytes; microscopic hemorrhages in the reticulum of the gland, with a dissociation of the cellular masses; there is an almost complete destruction of the medullary layer with cellular pycnosis. —La Presse Medicale.

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Venesection in Eclampsia and the Pre-eclamptic State.

Potocki advocates the use of venesection in all albuminuric cases in pregnancy in which convulsions are threatened or have begun. If a liberal amount of blood is removed, i.e., 600 to 1,000 grams, relief is at once obtained. The use of chloroform and chloral as sedatives in convulsions has a bad effect on the liver and kidneys, which

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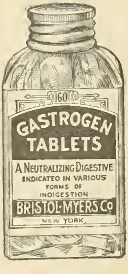

should be able to remove the poisons from the organism. Jaundice is frequent after the long use of chloroform in eclampsia, and even after laparotomies. Increased arterial tension is one of the most important symptoms of the eclamptic or pre-eclamptic state, and remedies should be administered for its relief. Often the congested, violet face of the eclamptic suggests the necessity of venesection. The author has used venesection in a number of pre-eclamptic cases with the result that the headache and agitation were relieved and the patients were delivered normally of living children. None of the patients died. Tarnier states that placing the patient on a milk diet for a week will relieve the albuminuria. But one cannot always wait a week for this remedy to act and convulsions may occur before the week has elapsed.—Journal de Medecine de Paris.

Bacillus Pneumonia.

Pneumonia caused by the Friedlander bacillus differs from the ordinary infection with pneumococcus in many ways. Herpes and chill are often absent and the temperature may be low despite the obvious severity of the disease. The sputum is abundant, mucoid, viscid and varies in color from gray to brownish-red. Microscopically, an enormous number of bacilli can generally be found, while in diplococcus pneumonia, the germ may be very difficult to detect. On pathological examination, the cut surface of the lung is not granular, but softer and more viscid, since the exudate consists almost entirely of bacilli. In about 50 per cent. of the cases, there is a rapid softening of the central portions of the infiltration. Clinically, a diplococcus pneumonia has usually run its course as soon as the chill appears, but in bacillus pneumonia, the course is much more protracted and the patients often die as a result of heart failure or exhaustion. Recovery seems to be the exception and often an abscess of the lungs develops. The temperature is frequently very low throughout the disease. The cause for this peculiar behavior must be found in the persistent and virulent character of the germs and in the slight reaction set up in the system Where there is a double infection with pneumococci and Friedlander bacilli, the latter generally gain the upper hand in a short time so that the pneumonia runs the course of a bacillus infection. Wherever a pneumonia is slow to resolve and the prognosis seems to be bad despite low temperatures, a bacillus infection must always be suspected and the sputum should be examined.—Muench med. Woch.

Iodipin in Cardiac and Arterial Disease.

As a substitute for iodides, A. Gorbatow believes that iodipin is especially worthy of notice, since it can be used subcutaneously and is therefore suitable for cases where the internal administration of the iodides is impractical or impossible. Among other advantages he mentions an improvement of the general condition, regulation of the bowels, better sleep and alleviation of pain. The author injects 25% iodipin daily without interruption for thirty days, but in smaller doses than are generally recommended. For arteriosclerosis, two such series of injections are given every year for two to three years. Good results from such treatment were also seen in angina pectoris and stenocardia, particularly where the vessels of the heart were affected. The histories of ten cases are given in full detail. They included severe cardiac lesions, usually complicated by arteriosclerosis. In the great majority of cases, no other drugs were ordered except occasionally a small dose of sodium bromide. Nitroglycerin and amyl nitrite, particularly, were avoided. The results in all cases were excellent and much better than one is accustomed to see after the iodides.—Wratschebnaja Gaseta.

"Ragit" Culture Media.

In order to facilitate the manufacture of culture media for smaller laboratories or scientific expeditions, all the solid ingredients are now furnished in a dried condition by Merck under the trade name, "ragit." Thus ragit-agar consists of agar-agar, peptone and Maggis granulated bouillon in proper proportions, so that 42 Gm. dissolved in 1 liter of water will yield ordinary agar-agar. It is best to boil for one hour in the steam sterilizer, then to filter hot and fill into test tubes; 22 Gm. of the ragit broth powder dissolved in 1 liter of water will furnish ordinary nutrient broth. Endo tablets are also furnished; they contain milk, sugar, sodium sulphite, soda and fuchsin. One tablet dissolved in 100 Cc. of ragit-agar will yield the Endo medium, so valuable for the differential diagnosis of colon and typhoid germs. K. Poppe has tested all these media and has found them suitable for all bacteriological purposes. The growth, formation of indol, pigment, etc., were just as marked as with media prepared in the ordinary way. Just as good results are obtained if one Endo tablet is used for 200 Cc. agar. The ragit-agar may also be employed for the Conradi-Drygalski and malachite-green media, though it must be handled more carefully since it is only 2 per cent. in strength. The media are inexpensive and their use will save much time and labor.—Berl. tierarzt. Zeit.

"in the treatment of muscular cramps, hot applications according to S. Solis Cohen, lessen the excitability and energy of the voluntary muscles and relieve the excruciating pains accompanying these attacks.

In neuralgia as shown by Du Bois Raymond, where there is compression of the nerve trunk by the over filling of blood vessels in contiguous areas, hot applications relieve the congestion and pain by diversion of the blood to other parts.

In the use of hot moist heat as a therapeutic agent in the treatment of muscular spasms and neuralgia, antiphlogistine seems to be particularly indicated. It relieves muscular tension, stimulates capillary and arterial circulation, thus removing the congestion and its accompanying pain.

Antiphlogistine is the most convenient sanitary and satisfactory method of applying hot moist heat. It retains its thermic value for hours, a feature of recognized importance in the treatment of inflammatory and congestive conditions."

Edema of the Eyelids in Children.

In discussing various difficulties of diagnosis encountered in children, the author calls attention to the fact that there are four conditions in which this symptom may be met with. The first two are chronic nephritis and the rare cases of congenital edema of the lids. The condition is also an early symptom of rheumatic pericarditis. In fact, it often appears before any other sign, unless it be an increase in the rapidity of respiration. In the three conditions just mentioned the edema is more marked in the upper eyelids, but in a fourth condition, whooping-cough, it is more often in the lower lids. As it appears sometimes before the cough it may be of assistance in the diagnosis. The author tells of the case of a boy brought to him because of loss of appetite, and who had no cough, but exhibited the symptoms above mentioned; a week later he developed the characteristie whoop. —Thursfield, Birmingham Medical Review, Birmingham, England.

The Pancreatic Syndromes in Tuberculosis.

M. Lœper states that tuberculosis is frequently accompanied either by pancreatic insufficiency or by pancreatic hypersecretion. The most frequent sign of the former is diarrhea. The latter is not infrequent at the beginning of tuberculosis. Tuberculosis may lead either to sclerosis, degeneration, atrophy, or inflammation of the pancreas, or to hyperplastic reactions, which are well marked not only in the lobules but also in the islets of Langerhans. From a practical point of view the author recommends what he calls "the intensive pancreatization" of tuberculous patients and states that in many cases of tuberculosis in which sclerotic or degenerative changes of the pancreas have followed hypersecretion the stimulation of the pancreatic secretion has given him very satisfactorp results.—Progres Medical.

Treatment of Gonorrhea in ths Female.

Wagner remarks that in the majority of cases, urethral gonorrhea in the female can be cured within three to four weeks but that involvement of the cervix is less amenable to treatment. The best results have been seen from prolonged irrigation with hot water. A speculum is introduced into the vagina and the cervix brought into view. 20 to 25 liters of water at 45 degrees C. are then allowed to run in under slight pressure. A wire speculum is employed, so that the hot water will cause hyperemia also of the walls of the vagina. For children, a catheter with lateral openings will usually suffice. The patient is kept in bed and irrigated daily until no more gonococci are found in the cervical secretion (usually after four weeks). Irrigations are then continued for another three weeks or until three consecutive examinations have been negative. She is then discharged, but examined once more in one week. More rapid cures were obtained with this method than with other proceedures.—Bsrl. klin. Woch.

Pituitrin in Osteomalacia.

In a certain percentage of cases, Bab found that pituitrin, the extract of the hypophysis is able to remove the bone-pains so characteristic of osteomalacia and in this way to improve the deplorable condition of these patients. It is impossible as yet to state how permanent the beneficial effect is. In a certain number of cases the effect was only partial and in some there was absolutely no change in the condition. The author contends that it is to be preferred to adrenalin since it lacks many of the disagreeable after-effects of the latter. Strangely enough, different cases of osteomalacia do not react in the same way to the different therapeutic measures; thus some do not react to phosphorus or adrenalin while others are not even improved by castration. The introduction of a new remedy is therefore of importance though the strict indications for its use still have to be determined. The treatment should be continued for months with large doses. Thus, in one case, as much as 266 Cc. were employed.—Muench. med. Woch.

Treatment of Insufficient Labor Pains.

Quinine sulphate was used by Marek in 126 cases of insufficient labor pains. In nulliparæ, it increased the intensity of the labor pains in 50 per cent.; in multiparæ in about 75 per cent. The customary dose was 0.5 Gm. three times. Berberine sulphate (Merck) was tried in 27 cases (one dose of 0.25 Gm. followed by two other doses of 0.07 Gm. in intervals of 10 minutes). In certain cases, it acts as well as quinine, but in multiparæ, the results are as a rule not so good.—Wien. med. Woch.

Asthma in Children.

Cornby (Arch. de med. des enfants) discusses true asthma as a paroxysmal respiratory neurosis. As to its etiology, it is a disease of young life, and is most frequent in the first two years of life. In 75 cases the first access of asthma appeared within the first six months on nine occasions, between the sixth and twelfth months on 15, and between the first and third year in 32 cases, The remainder all occurred before the sixth year. Out of the 75 cases, 40 were heredi-

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tarily disposed, and, failing a direct history of asthma, there was in every case an hereditary history of the arthritic diathesis. It is not usual for children of the same family to be affected by this hereditary taint in precisely the same manner; one may be asthmatic, while another may display it in the form of migranous attacks, or some other variation of a paroxysmal neurosis. A great many of these children are nervous and excitable, and some have convulsions. The author's experience does not allow him to agree with those who affirm that adenoids and similar sources of local irritation are directly causative of asthma. There must be the hereditary taint, and that being present a wide range of exciting causes may precipitate an attack. Laryngismus stridulus, spasm of the glottis, or convulsions may accompany the asthmatic paroxysm with regard to prognosis; the mechanical lesions resulting in emphysema are more reparable in the young. Emphysema is the rule in old asthmatics, as it is the exception in the young. The cardiac mechanism withstands the strain, too, very well in childhood. The prognosis is largely influenced by the regimen under which the little patient is placed. The diagnosis in an infant is sometimes difficult in the case of broncho-pneumonia. Spasms of the glottis and the various stridors, resulting from compression of the trachea, are, as a rule, quite distinctive. The treatment resolves itself into two parts (a) treatment of the attack, (b) constitutional treatment. In the former case, oxygen may be required, while mustard poultices are of service. Dover's powder may be given, and a mixture containing belladonna, grindelia, and lobelia. In the intervals, the child must have plenty of fresh air, exercise without fatigue, and cold baths. The dietary should follow vegetarian lines, and everything calculated to excite the nervous system should be avoided. Sodium iodide may be administered for ten days, following which sodium arsenate may be given, and so on alternately.—Brit. Med. Jour.

Treatment of Pernicious Malaria.

W. W. James,. of the Ancon Hospital, Ancon, Panama, has made an interesting report on the treatment of pernicious malaria. Referring especially to æstivo-autumnal malaria, he brings out many points of interest. James writes that it is impossible to lay down any hard-and-fast rule as to the number of parasites required to constitute a dangerous case of malaria. He does, however, regard an infection of 200,000 parasites per c.mm. as being suspiciously indicative of a bad case. This means that there is one parasite to every twenty or twenty-five erythrocytes. With infections heavier than these vigorous action is taken. Reminding his readers that malaria brings about death in four different ways, he discusses the means of preventing death in the first three cases. In the first case, the capillaries of some vital organ become blocked by erythrocytes, which are so damaged by parasites as to clog up the organ. This is frequently the case with the brain. Second, the organism is often overwhelmed by the sporulation, simultaneously or continuously, of parasites in such numbers that the amount of toxin liberated from them causes dissolution. Third, by a combination of these two, the capillaries of some important organ being so clogged with erythrocytes as in the first case, that they are unable to cope with the toxins. In the case of death by the influx of numerous parasites, James writes that, whereas the parasites are of varying resistance in different infections, it is his opinion that if enough quinine can be thrown into the circulation at the beginning of the cycle, the younger parasites can be so affected as to cause the abortion of the subsequent paroxysm.

Experiments to ascertain the compatibility of quinine salts with blood sera resulted in the following deductions: Those salts of quinine which are most soluble in water are not miscible with blood serum. The three salts commonly used for subcutaneous injections, when prepared in the strength most frequently used in hypodermic administrations and mixed with equal volumes of ox serum, produced a solid gelatinous mass. Quinine salts, then, in the dilutions usually employed are unsuitable for hypodermic use. Solutions of quinine salts in concentration employed for hypodermic injection, when mixed with blood sera, produce quinine in an altered form. In intravenous administration, it is necessary, in order to avoid the dangers special to quinine, to dilute considerably. This method of application is called for in cases of emergency, as in pernicious malaria, with coma or other cerebral symptoms. The author is convinced that the failure of quinine in large doses, administered early in the cycle as in several cases observed, was due to improper administration. It is reasonable to suppose that more quinine, when administered hypodermically, is assimilated by the system from small doses than from large ones. The author submits charts to show the progress of several cases under his care.

In summary, the author maintains that two conditions must be inhibited: (a) "The blocking of the capillaries by the parasite-infected erythrocytes, and (b) the simulta-

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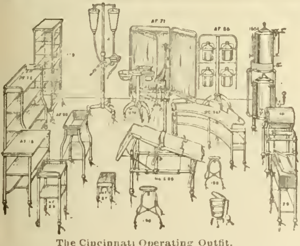

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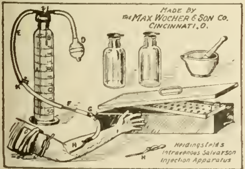

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Medical Society of the State of North Carolina meets in Hendersonville, June, 1912.

The Tri-State Medical Association of the Carolinas and Virginia (only members of State Societies eligible). Next Annual Meeting: Norfolk, Va. Date of meeting February 1913, President, Dr. A. E. Baker, Charleston, S. C., Secretary Treasurer, Dr. Rolphe Hughes, Laurens, S. C.

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neous sporulation of a great number of parasites.''

''The logical and practical treatment is to give quinine early in severe infections, subcutaneously in large doses, or by intravenous injections, in dilutions of 1 to 150, or greater. In algid cases, quinine is best given intravenously.''—Jour. Tropical Med. and Hygiene.

Poisoning with Naphthalene.

Prochoronik prescribed 0.25 Gm. of naphthalene, four times a day, for a boy six years old suffering from oxyuria. After seven doses, the patient began to vomit and became stuporous and restless. The pulse was 100, strong, and the spleen was distinctly palpable. Castor oil and an enema were ordered, but on the following morning there was a decided change for the worse and jaundice appeared. The urine was scanty and loaded with albumin. There was absolutely no reaction to stimulants; respiration and heart action became progressively worse and soon death set in. At the autopsy a persistent thymus and cloudy swelling of the organs were found. The dose given in the text-book varies from 0.05-0 5 Gm. It is possible that in this case there was an idiosyncrasy toward the drug or that the castor oil did not act sufficiently so that a relatively large amount of naphthalene was dissolved and absorbed The author concludes that it is advisable to employ some less harmful drug in the treatment of oxyuris.—Therap. Monatshft.

Puerperal Psychoses.

Lucien Picque distinguishes among psychoses connected with pregnancy and the puerperal state between febrile states accompanied by delirium, which he considers to be always due to an infection of the uterus of more or less degree of severity, and the afebrile one. The febrile cases should always indicate an evacuation of the uterus and should be treated only in a hospital where surgery is done and not in an asylum. The uterine wound should serve as a line of separation between the psychoses of pregnancy and of the puerperal state. While there must always be a predisposition to mental trouble, still it is the results of infection that make the condition incurable. If the uterus is early excuated one may get a cure but if the condition of infection becomes chronic there shall get changes in the brain cells that will render the condition permanent. In the apyretic forms we generally observe meloncholia; in the febrile forms confusion, hallucinations and maniacal attacks. The apyretic forms should go to an asylum. the febrile to a surgical hospital.—L'Obstetrique.

SPECIAL WESTERN NUMBERS

In furthering the plan of producing special issues of the **American Journal of Surgery** composed of contributions by surgeons residing within a certain geographical area, yet of international reputation there will be issued in the early part of 1912 a **Special Western Number** of this magazine.

Subjects and those to contribute:

The Operation of Gastroenterostomy, by William J. Mayo, Rochester, Minn.

The Surgery of Tendons, by John B. Murphy, Chicago, Ill.

Operative Treatment for Graves Disease, by George W. Crile, Cleveland, Ohio.

Colonic Intoxication, by J. E. Binney, Kansas City, Mo.

Practical Points in the Surgical Treatment of Exopthalmic Goitre, by A. J. Ochsner, Chicago, Ill.

Treatment of Foreign Bodies in the Esophagus, by E. Fletcher Ingals, Chicago, Ill.

Brain Surgery Technique, by J. Rilus Eastman, Indianapolis, Ind.

Treatment of Abscesses and of the Necrotic Foci Resulting from the Use of Salvarsan, by A. Ravolgi, Cincinnati, Ohio.

Treatment of Prostatic Obstruction, by E. O. Smith, Cincinnati, Ohio.

Subject not Announced, by H. Tuholske, St. Louis, Mo.

Artificial Tendons and Ligaments in the Surgical Treatmeut of Paralysis, by Nathaniel Allison, St. Louis, Mo.

Uterine Cancer, by John C. Murphy, St. Louis, Mo.

Arthritis Derformans, Leonard W. Ely, Denver, Colo.

Acute Angulation and Flexure of the Sigmoid as a Causative Factor in Epilepsy with special Reference to Treatment, by W. H. Axtell, Bellingham, Wash.

The character of contributions prepared by these well known surgeons are of such a nature as to make this number particularly interesting.

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Dr. Wyatt S. Beazley, 2713 East Broad Street, Richmond, Va., under date of September 11, 1902, writes:

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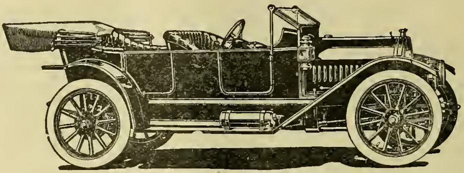

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Secy., Henry Enos Tulley, M. D., Louisville, Ky.
Treas. S. C. Stanton, M. D., Chicago. Ill.
Next Meeting Detroit, Mich., Sept, 13th-14-15, 1910.

SOUTHERN SURGICAL and GYNECOLOGICAL ASSOCIATION.

Annual Meeting at Washington, D. C., Dec, 19-21, 1911.
W. D. Haggard. M. D., Sec., Nasheville, Tenn.
Rudolph Matas, Prest. New Orleans, La.

SOUTHERN MEDICAL ASSOCIATION.

Annual meeting at Hattiesburg, Miss. Nov .14-15-16, 1911.
Oscar Dowling, M. D., Sec. Shreveport, La.
Isadore Dyer, M. D., Pres. New Orleans, La.

TRI-STATE MEDICAL ASSOCIATION OF THE CAROLINAS AND VIRGINIA.

Annual Meeting at Norfolk, Va., Feb. 23-24, 1912.
Ralfe E. Hughes, M. D., Sec., Laurens, S. C.
A. E. Baker, M, D., Pres. Charleston. S. C.

MEDICAL ASSOCIATION OF THE STATE OF ALABAMA.

Annual meeting at Birmingham, Ala., April, 19 1912. J. N. Baker, M. D., Sec., 602 S. Perry St., Montgomery, Ala.
L. C. Morris, M. D., Pres. Birmingham, Ala.

MEDICAL ASSOCIATION OF THE SOUTHWEST.

Annual Meeting at Oklahoma City, Okla. October, 1911.
F. H. Clark, M. D., Sec., El Reno, Texas.
M. L. Perry, M. D. Prest., Parsons, Kans.

FLORIDA MEDICAL ASSOCIATION.

Annual Meeting at Tampa, Fla. May, 8-9-10, 1912.
J. D. Fernandez, M.D., Sec., Jacksonville, Fla.
A. H. Freeman, M. D., Pres. Starke, Fla.

MEDICAL ASSOCIATION OF GEORGIA.

Annual Meeting at Augusta Ga., April, 17-18-19 1912.
W. C. Lyle, M. D., Sec. Augusta, Ga.
W. L. Felts, M. D., Pres., Corrollton, Ga.

KENTUCKY STATE MEDICAL ASSOCIATION

Annual Meeting at Louisville, Ky. 1912. (Date not decided)
Arthur T. McCormack, M. D., Sec., Bowling Green, Ky.
Jas. G. Carpenter, M. D. Prest., Stanford, Ky.

LOUISIANA STATE MEDICAL SOCIETY.

Annual Meeting at New Orleans, La. April, 23-25, 1912.
Joseph D. Martin, M. D., Sec., 141 Elk Place, New Orleans, La.
R. O. Simmons, M. D. Pres. Alexandria, La.

MISSISSIPPI STATE MEDICAL ASSOCIATION.

Annual Meeting at Jackson, Miss, April 11, 1912.
E. F. Howard, M. D., Sec., Vicksburg, Miss.
D. J. Williams, M. D., Pres., Ellisville, Miss.

MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA.

Next Annual Meeting at Hendersonville, N. C. June, 18, 1912.
A. A. Kent, M. D., Pres. Lenoir, N. C,
D. A. Stanton, M. D., Sec., High Point, N. C.

NEW MEXICO MEDICAL SOCIETY.

Annual Meeting at Roswell, N. M. (Date not yet decided). 1921.
Dr. R. E. McBride, M. D. Las Cruces N.M. Secretary.
R. L. Bradley, M. D. Pres, Roswell, N. M

SOUTH CAROLINA MEDICAL ASSOCIATION.

Annual meeting at Columbia, S. C., April 20, 1912.
Edward A. Hines, M. D., Sec., Seneca, S. C.
J. W. Jervey, M. D., Pres. Greenville, S. C.

TENNESSEE STATE MEDICAL ASSOCIATION.

Annual Meeting at Chattanooga, Tenn. April, 9, 1912.
Perry Bromberg, M. D., Sec., Nashville, Tenn.
C. J. Broyles, M. D., Pres. Johnson, City, Tenn.

MEDICAL SOCIETY OF VIRGINIA

Annual Meeting at Norfolk, Ky. Oct. 22-25, 1912.
P. A. Irving, M. D., Sec., Farmville, Va.
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Staphylococcus Vaccine (Citreus) Staphylococcus Citreus Bacterin).
Staphylococcus Vaccine, Combined (Staphylococcus Bacterin, Combined). — For furunculosis and carbuncle, sycosis, suppurative acne, etc.
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VOLUME 65.
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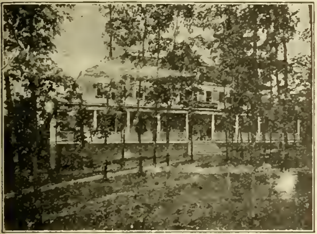

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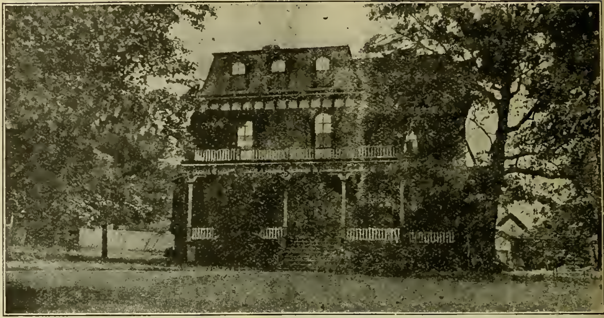

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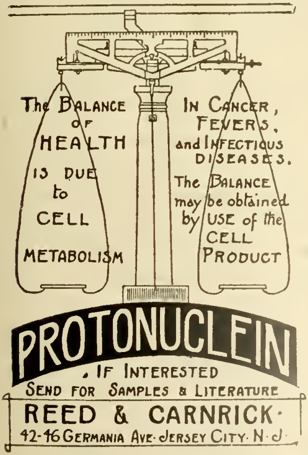

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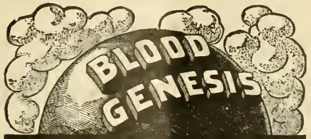

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The Charlotte Medical Journal

VOL. LXV CHARLOTTE, N. C., MAY, 1912. No. 5

The Advisory Part of the Treatment of Tuberculosis.*

By Dr. Clyde E. Cotton, Black Mountain, N. C.

In our professional relations with our tuberculous patients there are a few points that I wish to emphasize. These points are not new but they are so very important that it appears to me not out of place that we should remind ourselves of them occasionally lest in our busy life we forget their importance.

There is probably no disease, so serious in its nature as tuberculosis, that the final successful outcome so much depends upon what the patient does for himself; and what the patient does for himself is chiefly dependent upon the kind of advice the physician gives him and the way and manner with which he gives it. The thoroughness with which he impresses the patient with the absolute necessity of following that advice. The medicinal part of the treatment of tuberculosis is secondary to the advisory part. Therefore when a diagnosis has been established the physician should take plenty of time to carefully explain to the patient the nature of the disease, the manner in which the disease makes progress and the insidiousness of the attack and extention and the often deceptiveness of the symptoms so far as the patient sees them. All this should be gone into in detail and perfect confidence established between physician and patient. And the time should be selected by the physician to do this when the mind of both physician and patient are clear and free as possible from worry or thoughts of other things; when the body is rested and the mind receptive. We all recognize that to present any new subject to our fellowman that requires thought and planning, so much depends upon the psychological moment or the mental condition of the listener as to the effect produced. This is true in politics, religion, science, business or the practice of medicine. Then a plan of campaign should be talked over but not decided upon until after careful and deliberate weighing of the advantages and disadvantages of every contemplated move. There is no routine advisory treatment, except in a general way, any more than a routine medicinal treatment. The degree of infection or advancement of the disease, the probable natural resistance of the patient to disease, the temperament of the patient, his home environment, his financial condition are all factors, and each plays a part in making up the advisory part of the treatment.

In a far advanced case that shows unmistakable evidence of extreme poisoning, when there is much emaciation, high temperature and a general septic condition it is useless to advise such a patient to leave home. Such a patient leaves home only to die. The only exception would be where a State or municipality maintained a hospital or sanatorium for advanced or hopeless cases,—the object for removal from home being to lessen the dangers of infection to the family.

If a patient's natural resistance to disease is low, and that unknown, indefinable quality called *vitality* is lowered, then our advice should be such as to call out every known means that may help in supporting the resistive forces of the body.

The temperament, the mental or psychic condition of the patient should be carefully studied and our advice so presented as not to startle or produce a mental shock. This is especially applicable to young women whose mental apparatus is highly sensitized.

The home environment should play a very important role in making up that part of our advice as to whether or not a patient should go to another place or climate. It is a doctrine in medicine that a mental condition free from care, worry, anxiety and irritating environment is a great help in the fight against any disease. The patient is not so much influenced by these conditions when he is sick with the acute diseases in which there is pain and suffering and the mental condition is sluggish and benumbed; but when the mental condition is clear and possibly over-sensitive by reason of the beginning of this chronic disease, then it is that the ordinary cares, worries and anxieties depress the patient and materially prevent the very condition we are so anxious to accomplish. It so often happens that if it be the father who is the invalid he cannot be entirely relieved at home of the cares and worries of the family and his business; and if the mother, she cannot at home be relieved entirely of the care of the children and the household duties; and if a son or daughter, it is almost impossible to avoid the social functions that make up so much of a young person's life or if they by effort do avoid them, yet friends are constantly reminding them and the thought is constantly brought to their minds of what they are missing and they cannot have that mental ease which is so essential.

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*Read before the Tri-State Medical Society (North and South Carolina and Virginia) at Columbia, S. C., February 22, 1912.

When the home surroundings are such that the mental condition can be improved by a change of environment then the patient should be so advised. I believe that the reasons above mentioned are among the chief ones why the home treatment of tuberculosis so often fails to be efficient.

There is probably no one condition that influences the physician's advice so much as the financial condition of the patient. Tuberculosis is an expensive disease. At best, even when a diagnosis is made early, it means a fight for many months and often for a number of years. I firmly believe that a suitable climate is a material aid in our fight against this disease, but is not all by any means. Living in the open air practically all the time, a wholesome, well balanced diet that gives the greatest number of calories for the least amount of work for the digestive apparatus, rest and freedom from mental worries,—these taken together still constitute the one most essential part in any treatment. If a patient can have these at home but has not means to have the same in a more favorable climate, his chances are better at home than elsewhere.

It is wrong to send a person to even a most favorable climate if he has not the means to carry out this great essential for a considerable length of time.

It is unwise and even harmful to advise what we believe to be the ideal plan of treatment when we know that it is absolutely impossible for the patient to carry it out. To suggest that if he could do so and so, it would give him the better chance is only to make him depressed and discouraged as he realizes his inability to do it.

For these general reasons and for special reasons that present themselves in each individual case, we should, indeed, consider well the conditions surrounding the patient and then give him the best advice that he can fulfill.

I deplore the statement sometimes made by our extreme optimists, that tuberculosis is easily cured. Statistics are quoted to us that the careful, systematic postmortem findings of recent years shows that a large per cent. of deaths due to other diseases showed old, healed tubercular processes and that the histories of these cases showed no record of a previous tubercular infection. The inference is drawn that if so many can really have a tuberculous lesion to an extent that the evidence remains for years, yet undiscovered by patient or his physician, that the disease is easily cured. I do not doubt the statistics that many people have had a mild, localized tubercular infection that recovered without either the patient or the physician knowing it, but I do question the accuracy of the inference that tuberculosis is so easily cured.

The person is indeed fortunate whose protective agencies in the blood serum is sufficient to prevent the enemy from gaining a substantial foothold, but when they do gain such a foothold it shows that the invader is (at least temporarily) stronger than the resistive force. If this relative strength of the two forces is kept up, of course the patient eventually dies. If we can so strengthen and increase the resistive force till it is a little greater than the invading force, then we gradually bring the patient to the condition we call "arrest" and then "apparent cure."

I believe that in the vast majority of cases the invading and resistive forces are very nearly balanced and it is only by constant, persistent and intelligent care that the resistive forces finally gain permanent control and master the situation. This is done mainly, not by medicine, but by advice that teaches how to live and how to conserve every atom of one's vitality and strength to fight the invader.

The General Application of Diet Based Upon Advanced Physiology of the Stomach.*

By A. W. Calloway, M.D., Asheville, N. C.

We study physiology for the purpose of determining normal functions and food, to ascertain its practical application to digestion, assimilation and ultimate nutrition. To pursue this course scientifically simply means to do it orderly and knowingly, therefore if the "new fangled" ideas of diet are not practical they are useless.

The purpose of this paper is to show how useful these newer ideas are in dietetic application. The digestive tube in its simplest conception is the infolding of a portion of the body for the inclosure of food, which must not only be serviceable but should be in such physical condition that it may be easily propelled through it.

The chief chemical end of digestion is to render food soluble, while mechanically we expect it to be thoroughly ground up and mixed with the digestive juices and at the proper time propelled forward to its proper place. We must look upon the stomach as a preparatory organ, as the small intestine is the active center of digestion and assimilation, whereas the colon might be termed the waste basket.

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*Read before the Tri-State Medical Society, Columbia, S. C., February 21, 1912.

The chemical and mechanical are inseparable and interdependent. With either at fault indigestion results. Even though the chemism may be perfect if motility is impaired there is harmful decomposition of food with injury to the walls of the tube and in hypermotility a great loss of food substance occurs. In the consideration of digestion the chemical side has been much more diligently pursued than the mechanical, but since the use of the Roentgen Ray and the bismuth meal great advances have been made in the study of motor functions. Gastric analyses have been greatly overrated, both in diagnostic and therapeutic application. Acids and antacids have been prescribed on single findings without taking into consideration other factors, and hence this method has been justly criticized. It would be of no value to modify a high acid with an alkali, if in so doing food should be unduly delayed by its presence.

A cicatrix near the pylorus and its mechanical interference deserves far more consideration than the chemical analysis, though both factors should be considered. To the X-Ray and bismuth meal we owe chiefly the recent advances in our knowledge of the position, size and shape of the stomach and its motor functions. By this method we have been able to observe the passage of food through the esophagus, the rate of gastric peristalsis and its rhythm, the contractions of the small intestine, the anti-peristalsis of the first portion of the large intestine, the rapidity of the exit of the gastric contents into the duodenum, from the duodenum through the small intestine into the colon and many other influences affecting these processes.

It was supposed by some men, especially the surgeons, that drainage was an important element in emptying the stomach, but according to Cannon this is a fallacy, and because of hydrostatic relations in the abdomen gravity there has no effect. It was formerly taught that food after passing through the cardia was churned up in the stomach and was evenly distributed throughout until acidulation was complete. The stomach is now looked upon as an organ of two compartments, the fundus which is a reservoir, and the pylorus, a canal for the acidulation and grinding of food. There is no peristalsis in the fundus and since acidulation cannot ever penetrate the bulk of food in it, there is permitted a longer saliva action upon the starch. It is now known that the contents of the fundus are subjected to steady pressure, the muscle tone being regulated by the degree of distention. A slow, steady pressure forces from time to time a small portion of the contents in the preantral part of the stomach. From here travel deepening annular constrictions to the pylorus at nearly regular intervals. So long as the pylorus remains closed these moving rings of contraction drive the food forward and backward alternately. At irregular intervals the pylorus opens; first the sphincter antri pylorici contracts, then the antrum itself, thus propelling softened chyme into the duodenum. The sphincter antri pylorici may contract so vigorously as to give the stomach an hour glass shape. Should the muscle be impaired as by a cicatrix or neurasthenia there is a regurgitation, and food may remain in the stomach unduly long.

The pyloric sphincter is one of the chief elements of concern in applying a diet. To have it functionate properly is as important as a daily evacuation of the bowels. Valves are vulnerable parts of anatomy, hence it is here we find the first symptoms of gastric irritability which mean congestion. This congestion frequently increases to the point of erosion, paving the way for ulceration, and it is common knowledge that a large percentage of chronic ulcers become cancerous. Pyloric symptoms are usually the first to appear in gastric intolerance. To obtain them an automatic action of the pyloric sphincrer is of prime importance.

It was formerly held that the exit of food from the stomach was brought about after hours of gastric digestion, declaring that after the long continual pressure and increasing constriction the pylorus could no longer withstand the continued peristalsis and at one time the entire contents of the stomach was literally poured into the intestine.

Cannon's theory of the acid control of the pylorus appears to be generally accepted and explains very plausibly that the passage of the food from the stomach is by piece-meals rather than in one entire amount. His theory in brief may be stated as follows: As food comes through the cardia, the pylorus closes and remains tonically contracted in spite of recurring intragastric pressure. It relaxes only when acid, more especially free hydrochloric acid, appears at the pylorus. In this condition a peristaltic wave carries a portion of the acidulated chyme into the duodenum and by reflex action causes the closure of the pylorus and stimulates the flow of pancreatic juice and the bile. Until these juices neutralize the acid duodenal contents, the pylorus will not relax. However, when neutralized the pylorus does relax, by stimulation of more acid chyme in the antrum. This process of exit occurs by automatic action over and over again, until the stomach is finally emptied.

It seems to me that the new theory of digestion by piece-meal is a much better and more conservative piece of work, such as you would expect of Nature, than for the stomach to dump at one time a large acidulated mass into the duodenum.

Cannon comments on the theory as follows: When all factors concerned in the proper functioning of the pyloric sphincter are considered, the control of its activity by the action of the acid above and below must be regarded as one of the most remarkable automatisms in the body. The highly important part which the pylorus plays seems to have been surmised by the ancients, who gave it the name "Keeper of the Gate."

Thus far my subject matter has dealt entirely with the newer ideas of the motor functions of the stomach because owing to the X-Ray it has been but recently that we have known about them. The chemistry of the stomach has been much better understood, and for this reason our dietetic application has in the past been largely based upon it, rather than in consideration of the mechanical factors. If we are to apply a diet scientifically it must fit the impaired stomach from all standpoints and in view of all factors concerned.

The scope of this meeting and the time allotted me does not permit a full resume of all the new factors (chemical and mechanical), which bear upon the subject. I prefer to call your attention to a few well defined points rather than to take up the whole subject, feeling that if your attention has been called to some of the possibilities in diet your interest will be aroused to such an extent that you may at your leisure take up the whole matter and derive from it full benefit. It would not be amiss, however, to give a brief review of the newer chemistry of the stomach and then leave with a few practical suggestions in the application of diet.

The secretion of the stomach under normal conditions is always acid, increasing from .2% to .4% as the gastric juice is more rapidly secreted. A bread diet excites the most digestive power, while milk excites the least. The total acidity is greatest after meat and lowest after bread diet. Meat requires the most gastric juice and milk the least.

The psychic secretion produced by sight, taste or odor of food, commences true gastric secretion. Meat broths, juices or extracts are excellent stimulants to gastric secretion, and herein lies their greatest value. It is the amalgamation of protein and starch in bread which accounts for its high digestive power. In regard to the enzymes, pepsin is to be remembered as only active in the presence of free hydrochloric acid. Peptones are the end product of peptic digestion. Hydrochloric acid acts in various ways in aiding digestion. It is anti-zymotic and antiseptic, being able to destroy pathogenic organisms and arresting fermentation. Its antiseptic action continues in the duodenum. Pepsin converts the proteins which is only possible in the hydrochloric acid medium.

Hydrochloric acid also converts cane sugar into dextrose and levulose. It is remarkable that gastric acidity may be produced as well by saturating the acid with proteins, forming acid albumins as well as by counteracting it with alkalies. Soluble protein passes through the stages of acid-albumin, paropepton, propepton, and finally peptone which is diffusable and ready to be assimilated.

A second important ferment in the stomach is rennin. Under the influence of hydrochloric acid it becomes an enzyme and spends itself upon the casein of milk. A third ferment found in the stomach is lipase, which is secreted by the gastric mucosa of the fundus. The heat of the stomach and its mechanical movements liquify some of the fats, thus allowing this ferment to split them into fatty acids and glycerine. It is well to know that the stomach plays a very small part in absorption. The salts, sugars and dextrines may be absorbed to a limited extent, and yet 90% even of water passes into the small intestine, which as we know is the center not only of digestive activity but of assimilation.

It has been well said that we feed our cattle more scientifically than we do our patients and I fear that thus far my paper has left you with little of practical importance. However, I shall attempt on the basis of this advanced physiology of the stomach to apply some general rules for feeding where there has been some gastric disorder. It is a well known fact that almost in every gastric disturbance, from the slightest perversion of function to the gravest condiiion of organic disease, there occurs a delay in the exit of food from the stomach. To overcome this delay becomes then one of the most important factors in feeding. It has been determined that certain classes of food leave the stomach more slowly than others.

Bearing this in mind in connection with chemical factors, it seems to me that we can draw from it a very practical lesson. The discharge of carbohydrates which includes chiefly the cereals, breadstuffs and in small percentage the vegetables, is much more rapid from the stomach than other classes of foods. Bread, toast, zwieback, crackers, shredded wheat and cooked cereals commence to leave the stomach within ten minutes after feeding, and in a normal stomach most of them have passed into the small intestine in three hours. Proteins which include chiefly eggs and meats leave the stomach more slowly than carbohydrates and yet more rapidly than fats. The delay is due to their affinity for the acid saturating it, thus delaying the appearance of free hydrochloric acid at the pylorus, preventing thereby the automatic opening. It is well to bear in mind therefore in hyperacidity that proteid feeding becomes a very effective remedy, owing to the ability of this class of food to saturate the excess of acid.

It must be borne in mind at the same time that in hyperacidity meats should be limited, as they would greatly delay the passage of food. It is in the hypoacid stomachs with delay of food contents in which milk does so poorly. All of us know that there are certain stomachs that will not well tolerate milk. The discharge of fats from the stomach begins more slowly than either carbohydrates or proteins. They rarely leave the stomach until an hour after eating, and their rate of emergence continues so slowly that there is never at one time a great accumulation in the small intestine. In experimentation on cats it was frequently found that fats were found to some extent seven hours after ingestion. Fats while in the stomach repress the formation of acid, hence the benefit of olive oil in hyperacidity. After they pass into the duodenum, the pyloric sphincter will not relax for the intake of more until complete emulsification has taken place. The digestibility of fats is greatly increased when intimately mixed with other foods, otherwise they float on the surface of gastric contents and inhibit digestion. Fats of a high liquifying temperature as a rule digest with the most difficulty. I have found that cream digests with much more ease when intimately mixed with one of the cereals. As a rule, therefore, raw cream feeding is not advised.

In a mixed diet composed of proteins, carbohydrates and fats, which, by the way, in the right proportions is the ideal one, it has been found that during the first half hour of digestion, eight times as much carbohydrates as proteins has left the stomach. At the end of an hour more than five times and at two hours twice as much. The fats when added in appreciable quantities delay the exit of both the above named foods. Water and weak solution of common salt ought to pass out in ten minutes and all in a half hour. Bouillon is almost as rapid as water and milk slightly more than carbohydrates but less so than soups. Coarse food if well masticated passes out better than the same kind of finer texture.

Both hyperacidity and hypoacidity delay the food of any variety. Lumpy food is delayed to a marked extent. An empty colon hurries the food while a full one delays it. A position lying on the right side hastens the passage of food, while lying on the left side, standing or sitting delays it.

It will not be possible in the time allotted me to cover many of the details of feeding but I trust that enough has been said to convince the members of this Society that there is a nicety about the application of food in the treatment of gastric disorders that far overshadows the benefits which may be derived from any medical prescription. There is room and need for both diet and medicine in the treatment of digestive disorders and it is to be hoped that many of our prescriptions will be revised in accordance with what might be called a newer and better understanding of the physiological processes of the stomach.

LIST OF FOODS ARRANGED IN ORDER OF DIGESTIBILITY, SHOWING THE TIME THEY REMAIN IN THE STOMACH.

One to Two Hours—Pure bouillon, beef juice, clam broth, malted milk, gruels with milk, boiled milk, buttermilk.

Three to Four Hours—Young boiled chicken, crisp bacon, beefsteak, partridge, boiled squab, roast beef, boiled ham, roast mutton, white portion of turkey, rye bread, graham bread, fresh bread, biscuits, rice, boiled, mashed or baked potatoes, carrots, beets, spinach, corn, cucumbers, radishes, peas, beans, tapioca or farina pudding, custards, baked apples, ripe fruits, raw or stewed fruits.

Four to Five Hours—Roast veal, roast pork, preserved fish, tongue, goose, duck, fried meats, baked beans, rich soups, hashes, gravies, sausage, lobster, crust of pies, candies, nuts, salads with oil.

16 Medical Bldg.

Goitre: Importance of Early Diagnosis.*

By Dr. H. S. Lott, Winston, N. C.

Much has been said, and written, of late, about goitre. Thus it has only fallen in line with other advances in our work, and has gradually merged from the shades of obsurity, and useless medication, to the field of enlightenment and the possibility of surgical help. The chief points in this field are, early recognition, before the appearance of exophthalmus, this being a late symptom, and about always associated with other and hopeless degenerative changes, and a differentiation as to time and extent of surgical removal of the gland.

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*Presented by request at meeting of Forsyth County Medical Society, March 26th, 1912.

In all lines of work, men have fields in which they excell. While visiting the clinic of the Mayo's, in Rochester, Minnesota, I was much impressed with the master work of Chas. H. Mayo in goitre cases, both in his operative technique and his portrayal of the pathology concerned, and it is largely through a study of his work, and his writings, and those of his pathologist, Doctor MacCarty, as well as his kindly response to my personal letter, that I have accumulated the material for this paper.

The thyroid is a ductless gland. Its exact function is not known. However, that its output contributes to the human economy is evidenced by the types of goitre known as hyper- and hypo-thyroidism; induced by either too much or too little functionating gland structure.

Anatomically, and in brief, the gland is composed of two, sometimes three lobes, with a connecting isthmus located at the upper part of the trachea, this tube passing between the two lobes, while the third, or pyramidal lobe, when it exists, usually arises from either the left lobe or the left upper part of the connecting isthmus, and ascends as high as the hyoid bone.

The conditions of hyper- and hypo-thyroidism are distinctive, and yet may merge, the one into the other, or the gland, having spent itself in overproduction, if the while poisoned patient survive, may again become quiescent through a reactionary cell exhaustion, or reversion, and the symptoms subside. *Like a spent volcano, it reverts to quiescence.*

That the play of the thyroid gland in the human economy is of importance, is also established and emphasized as fully by its anatomic absence in the life history of the type, Cretin, with its general want of mental and physical development, as it is in either the excessive, or faulty, functional activity, which produces the groups of symptoms known as either hyper- or hypo-thyroidism. And again, when excessive secretion, instead of being distributed and producing toxemia, locates within the gland structure as a retention cyst, leaving normally functionating portions undisturbed, and yet, much enlarging the body, it completes the possible tripod of surgical foci and endangers the life of its victim by pressure upon surrounding and vital structures.

In considering the symptoms of abnormal thyroid existence, let us class them in three groups; thus emphasizing the tripod, (of pain or disturbance of function, of infection, and of possible disaster from either rupture or pressure), that should appeal to the surgical conscience.

First, let us consider hyper-thyroidism. (Quoting Doctor Mayo): Formerly only such cases as presented all the symptoms in a severe form were accepted as Graves' Disease. The belief that the disease represents a condition sui generis, and thereby differs from all other diseases, still prevails among many members of the profession. They pronounce well marked cases as pseudo until the eyes become prominent. Should this feature have been delayed, even if all other symptoms are present, it is not until this condition appears that they are properly labeled as a disease, after all representing but a syndrome of symptoms. It is now definitely shown that the condition is not one which involves all the organs at the onset, but that it is like other diseases in presenting acute, chronic, mild, severe and irregular, or remittent, types.

Results of accumulated knowledge in the examination of all forms of thyroid disease, is that there is a definite increase in the parenchyma of the gland in all forms of exophthalmic goitre, with evidence of overactivity of cell secretion. Pathologists who are experienced in this class of laboratory work are usually able to give the symptoms and stage of the disease from a typical microscopic slide; and from the form of the degeneration of the tissues in some cases, can estimate the probable condition of the heart, liver, and all essential organs.

It seems probable that a thyroid which presents this condition of hyper-thyroidism, and does not destroy the life of the individual, or destroy itself, must at some period of its activity revert back to simple goitre, when the gland will lose its apparent cell activity. From the examination of a great many thyroids of this type, it would appear that this change, or reversion, may appear at any period, and that certain exceptional individuals are able to withstand the disease until there is a degeneration of the parenchyma, and positive loss of secretion, or hypo-thyroidism, shown by varying degrees of myxœdema as a terminal condition following former hyper-thyroidism.

There may be wide variations in the quantity of thyroid secreted in simple and cystic goitres within the limits of health. Theoretically, in the one case there should be hypo-thyroidism, in another, hyper-thyroidism, yet neither of these conditions can be constantly recognized. The break in the equilibrium of the associated ductless glands to produce hyper-thyroidism under such conditions is seemingly brought about in the majority of cases by some infectious disease or severe illness, although a considerable number of cases exhibit the first symptoms through a change in the nervous system following a severe mental shock.

Little has been added to our knowledge of the etiology of simple goitre; and concerning that of exophthalmic goitre, much is written and little known. Heredity seems to be an important factor in some cases. We still lack the knowledge as to whether the stimulus is from within, or without as a chemical irritant or hormone. There is less iodine in the gland of hyper-thyroidism than in the normal gland.

Reviewing in brief the most important manifestations of hyper-thyroidism, we find tachycardia as the most usual heart condition. In advanced cases the heart may be irregular in rhythm and the pulse of low tension. Dilatation of the heart must be differentiated from dilation with hypertrophy and compensation, and from pure myocardial disease as well.

The eye symptoms are numerous and may appear early or late, and one or all of them may be present. These symptoms consist of prominence, a widening of the palpebral fissure (Dalrymple), staring without winking (Stellwaz), lagging of the lids with eye movements (Graeffe), insufficiency of accommodation at near points (Mobius). Rarely there is dislocation of the globe. Ulcer of the cornea is not uncommon in marked cases. Chronic nephritis may also produce some of these symptoms. Tremor is nearly always present—eight or nine to the second—and may be associated with chorea-like movements in extreme cases, with, as a rule, great muscular weakness.

In goitre, the thyroid may be but little enlarged in the early cases, or enlargement may be the first symptom. If it is present a long time before the onset of Graves' Disease, the microscopic changes will be parenchymatous increase of cells projecting into the colloid retention in the vesicles. From these cells the secretion is derived. Operative deductions from certain cases would indicate that a wonderful cell increase may occur with but little enlargement of the thyroid as a whole, and it is apparent that the secretion is delivered and not retained.

The general symptoms are sweating, anemia, emaciation, and loss of strength in the majority of cases. Vomiting and diarrhea without apparent cause are common, but transient symptoms. Pigmentation of the skin is often seen, and a bronzing is not unusual. Urine small in amount. Albumen is found occasionally in many cases. Patients in advanced conditions may have it in considerable amounts, as well as the hyaline and granular casts. Transient glycosuria is often noted, and occasionally a true diabetes. Irregular fluctuations of temperature tending to normal, yet often up one or two degrees, are common. There is often excitable or nervous irritability and sometimes altered disposition with mental depression and signs of mania.

Says Doctor MacCarty: "I feel that there are early cases which are not diagnosticated as soon as they should be, because the symptoms are not associated with noticeable external glandular enlargement; it behooves the examining physician, therefore, to consider the possibility of hyper-thyroidism in all cases of tachycardia and extreme nervousness. The contrast between a patient with hyper-thyroidism and one with hypo-throidism is very marked, the conditions being clinically quite opposite, in that one is the subject of extreme activity, while the other is a subject of extreme apathy or sluggishness. The simple goitre or "colloid" goitre, which we recognize clinically as an enlargement of the thyroid without symptoms other than pressure, should be properly called a cystic thyroid or a cystic goitre, because the tumor histologically is composed of multiple small or large cysts with their contents. The term "exophthalmic goitre" is based upon one clinical sign—exophthalmos—which is not constant in hyper-thyroidism. On the other hand, there are cystic goitres which sometimes show exophthalmos, and hyper-thyroidism without exophthalmos."

"Today, we know that the human organism contains a "normal" thyroid which represents colloid production, an absorbable secretion, the process of absorption, and no excretion into the alimentary canal. The welfare of the organism is dependent upon its food supply, the process of digestion, and air, and would live advantageously if it were not for the entrance of antagonistic organisms, or substances, through the portals of entry, the substances which arise in the intestine, or as a result of metabolism. Normal man and his relations to his thyroid may be expressed by saying that he has air, food products (including water), the process of digestion and a glandular organ (thyroid), which produces colloid material, an absorbable secretion, and shows the process of absorption, but does not empty its secretion into the alimentary canal."

In the condition of Cretinism, in which there is an absence of thyroid secretion and a concomitant physical underdevelopment, great improvement may be seen after thyroid feeding. All these examples demonstrating the physiological necessity of the products of the thyroid. And finally, "Why one thyroid should develop into a cystic or 'colloid' goitre, with maybe only pressure symptoms, and another into an 'exophthalmic' goitre, is unknown; just as the process of cyst formation and its counter-part, the absorption without cyst formation, in the kidney and liver, are unknown."

In brief resume:

I. The process of goitre may be a process of reversion of the thyroid gland to some former function.

II. Hyper-thyroidism is a toxæmia, the result of absorption of hyper-active thyroid.

III. The types of goitre are probably not types, but stages, in a general process."

Treatment, therefore, of goitre depends upon the pathologic changes in the gland, and its terminal results in each individual case.

Frankly, it seems to me that medication amounts to little, save those measures, and those agents, that conserve vitality against toxæmia, and support nutrition. If the symptoms are either those of pressure, purely; of pressure from hypertrophy with over-production and resultant systemic toxæmia added, or from excessive secretion with systemic toxæmia without enlargement of the gland and before the onset of hopeless terminal results in distant organs, then the surgical removal of a portion of the offending focus most certainly seems to be indicated.

Another Method for Drug Habitues.

By A. B. Grubb, M.D., Cripple Creek, Va.

A convict at the Virginia penitentiary when admitted was using 30 grains of morphine daily. He had been an addict for a long time and while under its influence had committed a baggage robbery. He was soon told that of all liberties, morphine would be the liberty of liberties to be taken away.

It was gradually removed and despite his lamentations he was soon off of the drug. An operation for hemorrhoids was then done and he was soon removed from the hospital to his cell and began hard labor. A changed man was he in physical and moral stamina, apparently incapable of the crime for which he was charged. His assimilation was better, his will developing and there was hope for this erstwhile child of drug addiction, this robber becoming an upright man, and 'twas all due to power and majesty of the law.

Another picture is that of the child of two universities, learned and scholarly, coming to a physician to be treated for the habit. "Now, doctor, I am on it bad, but I have come to be treated, and when I make up my mind to a thing that settles it." Declaring still further that he was of Napoleanic build, that he would prove to be a dutiful patient and *tomorrow* was ready for the tapering to begin, for it was only too plain to him that it was shattering all trace of manhood in him.

A little tapering was slowly begun and he began to writh and wriggle under what he termed his "aquae purificati." "Make the dose larger today, doctor, and tomorrow I can stand it on less," but tomorrow never comes with the doper nor the bad paymaster, and in a few days this man of Napoleanic strength ran off from his physician only to try sanitarium after sanitarium and is probably worse today than ever before.

In the use of morphine a vicious circle is produced, for each dose must be larger and each dose lessens the victim's resistance more than the preceding one until the very depth of human depravity is reached, but if by the stroke of a strong arm the drug can be removed, the manhood strengthens day by day, the craving becomes less and less and finally we have the semblance of a normal man before us.

What every State needs is a State Sanitarium regulated by State laws and officers. Give to the magistrates and judges power to commit "dopers" to this institution for treatment for a period of six months or more or until experience should determine what is the most desirable length of time for treatment. This will in a large percentage of cases undoubtedly effect a permanent cure, and those patients who relapse can be easily re-committed and they will at least lead clean and useful lives while under the care of the institution instead of having the very essence of their souls warped by the baneful effects of a demon that leads them whither-so-ever it will.

Such a sanitarium should be near a well equipped surgical hospital so that any surgical cause might be removed.

Many morpho-maniacs began by using morphine for renal and gall-stone colic. This of course should be remedied by a careful surgeon. Many are heavy brain workers and began by taking it to quiet an over-worked brain. These of course should be under the watchful eye of a competent internist, and so on down the line of real and imaginary ills, all should be removed and hope and buoyancy given to the unfortunate victim.

The sanitarium should also have a farm in connection with it so that it may be self-supporting and not a drain on our taxpayers. Besides, work on a farm in the open air will help to develop the physical as well as the moral man and add strength to fight the battles of tomorrow.

So we hope that all physicians will join hands in pushing the good work along, for it is a good cause that takes a drivelling bore who is a menace to his home and community, which shows that the law is supreme, which reaches out an arm of pity and lifts him out of the quagmires of sin and despair and says to him, "Arise, be a man."

Hysterical Neuralgia Relapsing Obstinately after Suggestive Treatment: Disadvantages of Suggestion.

By Tom A. Williams, M.D., Washington, D. C.

A man of seventy-eight was referred by Dr. Sterling Ruffin on account of intractable neuralgia in the right side of the head and neck. It was said to occur paroxysmally after swallowing or eating, and to be relieved by pushing the thumb into the neck below the ear and pressing with the fingers along zygoa and temple.

Two years before, he was upset from a mowing machine onto his head and rendered unconscious for an hour and a half. In consequence, he had to remain nine weeks in the hospital in great pain, and was speechless for seven. Speech had returned suddenly. He has had pain ever since, except for three months during which Dr. Wells removed it by intrapharyngeal medication.

On examination, no abnormalities were found; but the patient complained of great tenderness on the right side half way up to the vertex, especially along the temporal artery. This sometimes reached the parietal eminence. There was also tenderness in the neck behind the ear; but I could not satisfy myself that it was confined to the distribution of the posterior auricular nerve.

Examination, however, was unsatisfactory, as the patient shrank so violently; so I could not exclude an actual neuralgia of peripheral origin, which, however, seemed inconsistent with the history of its removal by medication of the pharynx. Before I had reached a conclusion, the patient ceased attendance, and has been lost trace of. But I include the case as a very probable hysteria induced by bodily injury, and cite it to illustrate the tenacity of a false idea ——— by previous appeal to direct medication by the suggestive influence of which it has been relieved. Nothing is more unfortunate for a patient's future than the suggestive therapeutics which uses as a vehicle some physical agency. This masquerade only intensifies a patient's false belief that his disease is physical, which much increases the difficulty of future treatment. The failure in this case was attributed to my own uncertainty as to the genesis of the condition, and to lack of time when I had decided.

Suggestion of any kind should be avoided in treating neurotic patients. Their real need is not encouragement or hoodwinking, however well meant. They can obtain those from unwise friends and relatives. What they require is enlightenment; and of that a wise doctor is the best provider. Some knowledge of psychopathology, common sense, and above all, freedom from psychological shibboleths, such as "the subconscious," "floating anxiety," etc., form a good groundwork for successful psychotherapy, upon which practice may build.

Of course, for the more complex cases the technical equipment of the specialist may be needed, even in treatment, while his services are often of essential value where differential diagnosis is concerened.

The Diagnosis of Hysteria.—The mode of treatment of which the cases are examples (Mch. Med. Annals, Jan., 1912) must be founded upon an accurate diagnosis, more specially where organic or functional disease is present in addition to the hysteria. Indiscriminate use of persuasion, however rational, will bring only discredit to the physician who employs it. The most nice discrimination is required in some cases to differentiate that portion of the syndrome which is psychogenic. And where organic disease of the nervous system is what is fimulated, an exact and wide knowledge of neurological signs is essential for a correct diagnosis. For, although hysteria may resemble apparently closely the condition produced by an organic or functional disease, differences always exist, which can be detected, however, only by one versed in the minutiæ of clinical neurology. For certain aspects of these, reference may be made to the writings of Babinski and his followers, and to the author's:

Nature of Hysteria, International Clinics, 1908.

Reflexes in Hysteria, Month. Cyclop., 1910.

Essential Differences of Hysteria and Psychasthenia, New Orleans Medical Journal, 1909.

Hysteria and Pseudo-Hysteria, Amer. Jour. Med. Scis., 1910.

Differential Diagnosis of Functional from Organic Disabilities, Archiv. of Diagnosis, 1908.

The Sensibility in Disease, Amer. Jour. Med. Scis., 1909.

The Function of the Neurologist, Medical Record, 1911.

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Treatment of Typhoid.*

By J. S. Brown, M.D., Hendersonville, N. C.

This paper will touch only a few high places in the hope of eliciting a helpful discussion, omitting the important matter of prophylaxis by vaccination, isolation, disinfection and fly destruction. Some nihilist will tell us that nothing is needed in treating this self limited disease, while an overbusy drug fiend would see his patient three times a day and give at least two new prescriptions at each visit. One extremist will kill some of his patients stuffing them with unsuitable food, while another may starve them to death. Some fellow with a hobby tries to rock all his patients through at the same gait, with his attention riveted on the hobby and not on the patient. In my judgment there is no safe routine treatment for all cases. Every patient is a law unto himself and must be studied and treated as an individual. Various special treatments have been devised only to drop into inglorious disuse, because no routine treatment suits all cases. However, a few general principles may be safely followed:

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*Read before the Columbia meeting of the Tri-State Medical Association February 21-22, 1912.

1. Practically all practitioners agree that for good and sufficient reasons *rest in bed* is eminently proper.

2. Cold or tepid baths not only reduce high temperatures but also allay mental excitement and promote toxin elimination.

3. A generous light diet should be selected from a list similar to this: Buttermilk, sweetmilk, milk and eggs, eggnog, well-cooked gruels of rice, barley, oatmeal, panopeptone and other predigested foods, and plenty of various fruit juices. Some cases do apparently well on the new generous diets like ham and eggs and rolls and potatoes, and yet I see no valid excuse for taking risks with such a diet, when a liquid or semi-liquid diet can be found which supplies all needed nutrition in an easily assimilable form.

4. Few drugs are needed. Osler says, constipation is to be desired and diarrhœa must be avoided. He must have been past 40 when he said it. I call to witness successful practitioners of every section, when I say "Keep the bowel gently open" and so encourage the expulsion of hordes of toxin producers and toxins. Intestinal antiseptics, though probably not strong enough to destroy the germs, certainly have a decided effect in inhibiting their multiplication. Probably no single drug accomplishes these two results of elimination and antisepsis more satisfactorily than fractional doses of calomel.

5. Serum treatment is still in the experimental, yet hopeful, stage.

Let me repeat and insist that every case must be treated on its individual merits. My chief, though manifestly limited, authority with which to fortify this advice is its reasonableness together with my case records. For 1910, two deaths in thirty cases, one in extremis when the faith cure family decided to call a physician, the other due to perforation which might have been remedied by operation under more favorable circumstances. For 1911, thirty-eight cases with thirty-eight recoveries.

Remarks on the Etiology and Treatment of Retroflexion and Prolapse of the Uterus.

By Dr. G. F. Duncan, High Point, N. C.

This paper attempts only to make a few remarks on the etiology and treatment of retroflexion (including in this term all retrodeviations) and prolapse of the uterus. It has been truthfully said that the etiology of prolapse is the same as that of retroflexion, hence the causes of these two conditions will be considered together.

The fundamental principles of anatomy and physiology of the pelvic organs must be thoroughly understood before the etiological factors bearing on the pathology of the subject in hand can be emphasized without confusion; in other words, the relation of cause and effect must be made clear in a study of uterine displacements.

An anatomic point of significance is that we have crowded into the female pelvis a portion of three tracts: Nearly all of the genital tract, with terminal portions of urinary and alimentary tracts, which form reservoirs for excretra increasing to meet the demands of civilization, and therefore forming undesirable companions for the uterus.

The uterus is a freely movable organ, being suspended in the pelvis directed forward at an acute angle to the uterine canal, supported from below by the perineum and suspended from above by round ligaments, broad ligaments, utero-sacral ligaments, and utro-vesicle ligaments, borrowing additional support from neighboring organs and tissues. In normal conditions the intra-abdominal pressure exerted from above in erect posture keeps the uterus in antiflexion or antiversion, thus this natural condition acts as a sustaining influence against displacement. Once the fundus is lifted up, due to a functional impairment of the round ligaments allowing pressure on the anterior part of the fundus, this same pressure which sustains the uterus becomes potent to force it out of position, downward and backward.

It is a wise provision of nature that through the diaphragmatic action of the womb and pelvic viscera free circulation of blood and lymph is maintained in health. The blood vessels in pelvic tissues have no valves and in consequence when the normal equilibrium of the uterus is disturbed, producing a displacement sufficient to induce pressure on neighboring tissues and organs, the integrity of circulation is jeopardized in the parts, exhibiting blood stasis with congestion and inflammation. In other words, uterine displacement to be considered pathological must produce pressure and interference with circulation. On examination we find many displacements of the uterus that do not produce pressure, or exhibit symptoms, consequently needing no treatment.

We reap by far the greatest harvest of uterine displacements from seeds sown through error or carelessness in the lying-in chamber. The history of cases coming under my observation during the last few years has pointed very convincingly to the fact that the cause of the trouble was brought about during child-birth. Two specific reasons for this are: First, laceration of the perineum; second, allowing the patient to get up too soon after confinement, in which case she may suffer all the evil results that come from sub-involution of the uterus. In this connection I must digress from my subject to emphasize the importance of finding and correctly repairing all lacerations of the perineum immediately after labor. We should also promote prophylaxis and popularize preventive measures by inducing mothers to rest in bed long enough to allow nature to restore in the greatest measure possible the parts affected in the child-birth. There is a tendency now among many obstetricians to allow mothers to get up on the fourth day. This practice should be condemned for the reason that it is impossible for sufficient involution of the uterus to take place, and as a result of the weakened ligaments, relaxed perineum, and a heavy uterus without support, we get a posterior or downward displacement.

It has been considered that it is mainly the muscular floor of the pelvis which holds the uterus in normal position. Should these muscles become insufficient, either by relaxation or by tear, a condition develops not unlike a hernial opening and the internal organs protrude on account of the force of intra-abdominal pressure. Clinical observation, however, proves that the normal position of the uterus is not simply due to the support of the pelvic floor, but that it is held in position by a distribution of fascial and muscular tissues which surround it on all sides, together with the round ligaments which act as guy-ropes to hold the uterus forward Any cause acting to unduly stretch these round ligaments will cause the fundus of the uterus to turn backward. In health the perineum being obliterated by a speculum the uterus under great strain or under traction can be pulled down and made to present itself, but as soon as released will return to its normal position by virtue of the contractile power of the ligaments. On the other hand, in case of weakened resistance in the ligaments the uterus may be pulled down in like manner but when once down will so remain. This to my mind gives evidence that for the preservation of the normal position of the uterus the integrity of the perineum and of the supporting ligaments must be maintained together. A weakness in any one of these factors tends to produce disorder and pressure which may bring on serious displacement.

In addition to labor and miscarriage, other causes acting to decrease the functional value of the normal supports of the uterus are mentioned as follows: Bad state of health; extreme muscular effort, including accidents; occupations which tend to bring strain on these parts; abnormal manners of dress, etc. These are all more potent in producing displacements in women who have never borne children.

Displacements which are secondary to tumors, adhesions, tube-ovarian disease, and other gross conditions in the pelvis will not be considered in this paper. The specific pathology must be investigated and the blame placed where it belongs; for instance, it would be poor surgery to treat a prolapse of the uterus which was caused by a tumor pressing down from above without removing the tumor.

Displacements from the standpoint of medical treatment are divided into acute or recent cases, and chronic cases.

At some time during the third week after confinement a vaginal examination should be made and if there is sub-involution with displacement active treatment with ergot, hot douches, and tampons should be begun at once. If displacement is thoroughly dealt with at this time, and medical and hygienic treatment kept up energetically during the first few months following labor, a cure may be effected and much future discomfort to the mother obviated.

In general, the medical treatment of uterine displacements should include all measures tending to improve the general health and resistance of the patient. Attention must be given to exercise, rest, diet and hygiene. Constipation should be overcome, the bladder and kidneys should receive attention; in fact, the emunctories in general should be stimulated. The patient should wear suitable clothing. Special treatment should be given to meet the indications found in the patient. Large, hot, vaginal douches tend to relieve pelvic congestion, restore circulation, and stimulate contraction of the uterine ligaments. Ichthyol and glycerine tampons should also be used. Pelvic massage and electric treatment, administered by experienced and well practiced hands will be beneficial. It is understood that in acute displacement the uterus must be replaced and held in place, if possible, by tampons or other means; a properly placed pessary sometimes serves a useful purpose in acute displacement. The use of pessaries in all cases except acute or recent cases should be condemned, inasmuch as they never effect a cure, simply postponing the surgical treatment needed to a future time when the patient is physically less able to bear it. I believe that the invention and use of the pessary has proved a greater curse than blessing.

Leukorrhea, metritis and ando-metritis due to congestion from pressure resulting from displacement are cured when the displacement is corrected, restoring free circulation. The practice of making intra-uterine applications of iodine, carbolic acid and the like in such cases is unsurgical, carries with it danger of infecting the patient, does not benefit the patient, and consequently should not be used.

An acute displacement of the uterus not relieved by medical treatment and minor surgical procedures within a reasonable length of time—say, one year—should be considered chronic, and in such cases indications for the need of major surgery would be obvious. In a consideration of surgical treatment the relations of cause and effect should be clear in the mind of the surgeon, that is, the real cause of the displacement should be definitely ascertained and treated accordingly.

There being no absolutely fixed position of the uterus, the index of surgical necessity must be determined by the amount of pressure, and whatever operation is chosen must relieve this pressure, restoring the parts to a normal condition, if a cure is to be effected. It is not practicable for me to discuss the relative merits of all the surgical procedures which aim at a correction of displacements. We are not limited to original devising in the choice of the particular operation we shall perform. A very extended programme has already been mapped out for us. In any case the operation must be one adapted to meet the needs of the patient, rather than adapting the patient to any particular operation.

For the sake of refreshing our memories I will enumerate some of the more important operations for the treatment of retrodeviations of the uterus:

Inguinal shortening of the round ligaments, or Alexander's operation, with substitutes.

Intra-abdominal shortening of the round ligaments.

Vaginal fixation of the uterus and vaginal shortening of the round ligaments.

Webster-Baldy operation.

Ventro-fixation and ventro-suspension.

Gilliam's operation.

Shortening of the sacro uterine ligaments.

Transverse attachment of the base of the broad ligaments in front of the cervix.

The curtain has dropped on ventro-fixations and ventro-suspensions. They have done much good in their time, but on the other hand much harm has resulted; even in our own experience we (that is, Dr. Burrus and myself) have had to operate on a number of patients to overcome the bladder pressure and other evil results which have followed in the wake of the ventrofixation.

For the cure of posterior displacements we have been partial to the round ligament shortening operations. Alexander's operation has been performed with good results in select cases, but it, with its substitutes, I would discard in favor of more recent procedures. A very scientific operation is that of Gilliam, which has given us excellent results. This has been our operation of choice until more recently. However, owing to the supposed danger of the obstruction of the bowels and other discussed objections, we have practically abandoned this operation in favor of the Webster-Baldy operation, which meets more fully all the requirements for the shortening of the round ligaments. This has proven successful and satisfactory in our work so far. Baldy describes the operation in a few words: The simple procedure of drawing the round ligaments through a perforation in the broad ligaments close to the uterus and directly under the ovarian ligament and around the posterior side of the uterus, fastening them together as they meet, and then fastening them to the uterus at a selected point. Experience has taught us that the success of this operation depends much on the selection of the proper point on the uterus for anchorage of the round ligaments, for obvious reasons. This operation restores the uterus when in retro-deviations and leaves it a movable organ. Collateral to this operation, if the patient should have a lacerated or weakened perineum, it should be repaired at the same time, also tears of the cervix, if any exist.

We have been using either the Webster-Baldy or the Gilliam operation, combined with restoration of the perineum, in either partial or complete prolapse, and a cure has been effected in practically all of these cases. It is not practicable to discuss within the time and scope allotted to this paper the details of the different operations for the restoration of the perineum. However, in any operation it is of the greatest importance to bring together with appropriate sutures the deep muscular structures of the perineum, including the levator ani muscles which are considered prime factors in perenial support. The operation as done by the Mayo's, in principle, with some modifications, has met all the above requirements and has been the operation of choice with us.

For total prolapse in elderly woman, or in other cases where the treatment mentioned above has not proven successful, many surgeons are doing an operation designed by Wertheim and known in this country as the "Watkins operation." It has been said to be very successful in cases of procidentia with descensus of bladder. The Mayos have reported about one hundred cases operated on by this method of interposition of the uterus between the vagina and bladder with excellent results. In our experience with elderly women we have preferred doing vaginal hysterectomy where the indications warranted it. Recently I have examined some of our cases of vaginal hysterectomy which were done more than a year ago in women after the menopause, and found them in good condition. It will be interesting to wait and see what may be the later results of the Watkins operation.

I have purposely omitted any reference to the usual operations for correcting cystocele in connection with displacements. I believe that if the perineum is restored and the displacement corrected, it will usually correct any existing cystocele.

A Method of Diagnosticating Malaria Long After Its Cure.—Thomson (Annals Trop. Med. and Parasitol.) has made many daily observations of the total and relative leucocyte counts in malaria extending over long periods of time and after the patients were apparently cured. His findings are remarkable and unique. They are accompanied by numerous charts. The summary in Thomson's own words, follows: (1) During active malaria the number of leucocytes in the peripheral blood is decreased. During quiescent malaria and in cases apparently cured by treatment, the leucocytes in the peripheral blood are much increased. (2) During the rigor and temperature in malaria the mononuclear leucocyte percentage (more especially that of the large mono-nucleated variety) is low. With the fall in temperature, however, the mononuclear percentage rises very high, sometimes even to 90 per cent. of the total leucocytes, This fluctuation in the percentage of total mononuclear leucocytes occurs also long after continuous quinine treatment and is observed for months and even years after the last attack of fever. (3) In these apparently cured cases of malaria the mono nuclear percentage is lowest at the time of the day at which the rigor and fever occurred during the previous active malaria; and moreover, at this time there also occurs a very marked leucocytosis, which continues only for a few hours. The leucocytes reach numbers as great as 30,000 to 50,000 per c. mm. of blood. On one occasion they were as numerous as 125,000 per mm. Two hours later they had fallen to 22,000 per c. mm., and in eight more hours they were only 6000 per c. mm. This case showed a regular daily periodic variation in the number of leucocytes, averaging from about 6000 per c. mm. to 50,000 per c. mm. The height of the rise always occurred about noon. This was the time at which the rigor and fever, which was quotidian, were wont to occur previously. This post-malarial leucocyte phenomenon occurred always without exception in the 40 cases examined and would therefore seem to be an infallible sign of previous malaria, as, so far, it has not been observed in any other disease. (4) It would appear that large numbers of malarial parasites on sporulating cause a leucopenia while a very small number on sporulating cause a leucocytosis.

The Use of Salvarsan in Mental Diseases

Dr. R. Dods Brown, senior assistant physician to the Royal Edinburgh Asylum, describes, in the Review of Neurology and Psychiatry for November, his experiences with salvarsan in 17 cases of mental disease of a syphilitic, parasyphilitic, and non-syphilitic nature. The exact record is as follows: One case of insanity from cerebral syphilis, five cases of general paralysis, five of dementia praecox, two of delirious insanity, two of chronic delusional insanity, and one each of acute melancholia and acute mania. Remarkable improvement took place in the first of this series, a man aged 41 who had contracted syphilis 11 years previously, and presented when under observation definite nervous and mental symptoms of intracranial syphilitic disease. Intravenous injection of 0.2 gramme was followed in 17 days by a further dose of 0.1 gramme. After the first injection the lymphocytic content of the cerebro-spinal fluid fell from 30 to 7.6 per cubic millimetre. Three of the cases of general paralysis were treated intravenously, and two intramuscularly. In all five cases the blood pressure rose after the injection, and there was in addition a relative leucocytosis in the blood. Clinically, no definitely favorable results were obtained in these cases, although in three some improvement was noted, but whether this is to be attributed to the special treatment is doubtful. It is noteworthy that the use of salvarsan in these general paralytic cases made no difference to the Wassermann reaction, which remained positive in the blood and cerebro-spinal fluid, yet a great reduction in the lymphocytic content of the latter took place in several of the cases, in one instance falling from 40 to 7.6 per cubic millimetre. The proteids remained unchanged. The results in the dementia praecox cases were practically negative, except that "in two cases the patients have become more accessible and responsive than they were before." In the other six cases where salvarsan was administered empirically no unequivocal results followed; it is true the two cases of delirious insanity apparently improved. One of the patients suffered from acute recurrent mania, and after receiving the injection she passed through two attacks, both of which were shorter and less severe than any during the previous two years. There was a very marked decrease in the amount of urine excreted in two cases. In one of these it fell from an average of 44 ounces to 16 ounces for four days. Speaking generally, the syphilitic cases gave a more pronounced temperature reaction and a more definite increase in leucocytes after the injection than the others, but the cases which reacted most did not show the best results. The value of the drug in mental disease is still problematical. Recoveries such as can be obtained in syphilis cannot be recorded; Dr. Dods Brown, however, considers that in the majority of his cases the physical health benefited materially.—The London Lancet.

Observations and Experiments on Typhoid Fever.

A Marrassini has studied the blood and feces of seventy patients suffering from typhoid or paratyphoid fever. He found in the feces a large number of forms intermediate between the typhoid bacillus and Bacillus coli. He also found at various periods of the disease in the same individual different types of microorganisms. It is suggested that from various influences or spontaneously there may occur a gradual transformation from one type of microorganism into another.—Pathologica.

Intravenous Ether Narcosis.

The duration of intravenous narcosis of aqueous solution of ether, as conducted by R. Hageman, varied from 40 to 135 minutes and the amount of solution necessary from 1050 to 3925 Cc. The stage of tolerance was reached in 15 minutes after 300 to 400 Cc. of solution. In one case, an alcoholic, no deep anesthesia could be obtained, but a few draps of chloroform by inhalation abolished the reflexes. It is also desirable to precede the anesthesia with a subcutaneous injection of morphine and scopolamine. In this way, the patients will fall asleep without any marked stage of excitation, and respiration and heart action will remain perfectly normal. Even when the total amount of fluid used was almost a gallon, no variations in blood-pressure were seen. despite the fact that the patient suffered from arteriosclerosis. Permanent injury was never seen, though occasionally there was transient vomiting and albuminuria. The best temperature for infusing the solution is 38° C. Ether is soluble at this temperatnre onlo to the extent of 4.68%. With lower temperature. more ether will dissolve and there is always danger of hemoglobinuria with more concentrated solutions. The advantages of intravenous ether narcosis are especially apparent in operations on the face ane cachectic patients. The loss of blood is better tolerated, the pulse remains stronger and the patients do not complain so much of thirst after the operation. There is virtually no danger of thrombosis or embolism.—Muench. med. Woch.

Danger Due to Substitution.

Hardly another of all the preparations in existence offers a wider scope to imposition under the plea of "just as good" than the scientifically standardized Eucalyptol.

The most recent fraud practiced in regard to this product is an attempt to profit by the renown of Sander & Sons. In order to foist upon the unwary a crude oil, that had proved injurious upon application, the firm name of Sander & Sons is illicitly appropriated, the make-up of their goods imitated, and finally the medical reports commenting on the merits of their excellent preparation are made use of to give the desired lustre to the intended deceit.

This fraud, which was exposed at an action tried before the Supreme court of Victoria at Melbourne, and others reported before in the medical literature, show that every physican should see that his patient gets exactly what he prescribed. No "just as good" allowed.

Charlotte Medical Journal

Published Monthly.

EDWARD C. REGISTER, M. D., EDITOR

CHARLOTTE, N. C.

HYPODERMIC INJECTIONS BEFORE GENERAL ANESTHESIA.

Normal equilibrium of the nervous system before operation, and consequent elimination of the psychic element as a causative factor in the production of surgical shock, is a desideratum universally recognized by surgeons and anesthetists. For many years various operators have made a preliminary hypodermic injection of morphine and atropine, half an hour to an hour before operation, a part of the routine in the preparation of their patients. Such medication unquestionably does quiet the patient, facilitate anesthesia, prevent excessive mucous secretion, modify surgical shock, and limit post-operative pain and vomiting, to a certain extent. Recently, however, replacing the atropine with a small dose of hyoscine has come into vogue, mainly because it is much more powerful as a cerebral sedative and creates pronounced dryness of the fauces. A large dose should not be used, for the reason that it will depress the vagus and vasomotor centres, while a small dose stimulates instead of depresses.

The influence and effects of a hypodermic injection of morphine, gr. ¼, and hyoscine, gr. 1-100, administered an hour and a half before operation, particularly upon restless individuals, are striking. By the time the anesthetist is ready to begin the narcosis, the patient is calm, without fear, drowsy, or even semi-conscious, and nerve hypertension is relaxed. The face is flushed, pulse full, and respiration slow. The nasopharynx and pulmonary tract are dry. A patient brought to the operating room in such a condition requires but a small quantity of the anesthetic, takes it quietly and without any period of excitement, and avoids the mental shock incidental to the sudden transition from consciousness and excitation to complete narcosis. The patient sleeps two or three hours after operation; nausea and vomiting are conspicuously absent, and post-operative pain is diminished.

The favorable conditions established by a preliminary hypodermic injection of morphine and hyoscine are obvious, narcosis being simplified for the anesthetist, this in turn being of benefit to the surgeon, and insuring a smoother convalescence for the patient. Nevertheless, in the hands of the inexperienced, such injections are not without unpleasant features. Respiration is depressed, sometimes to fourteen or fifteen per minute, or lower, and the nitrous oxide or ether should not be pushed too rapidly. This, however, is a difficulty easily overcome by a trained and observing anesthetist. Also, too much anesthetic during operation may precipitate profound cyanosis or even suspended respiration, while contrariwise, the quiet breathing may deceive and the patient may "come out." So to assure an even narcosis, eliminate the unfavorable features, and avoid danger, it is particularly necessary in these cases that the anesthetic be in the hands of an experienced anesthetist. Careful observation, circumspection, and practice will soon teach him the essential points. W. T. D.

THE NEW MUSEUM OF HYGIENE IN PARIS.

Among the evidences of practical advance which are shown in the City of Paris is an institution organized only about three years since and which has been open rather less than a year. It is an institution such as should be organized and supported in every large city, and is of a kind which is undoubtedly calculated to be a profitable investment, both from a financial point of view and from the standpoint of the welfare of the people.

A museum of hygiene has been established which, although already on a large scale, is destined to great extension and to become one of the important features among the many world renowned museums of that city.

Its purposes are varied, for it is intended not only to show to the people the evils of bad conditions of hygiene and the advantages of better systems but it is organized to perform certain active functions which are essential to the hygienic safety of the people. For example, there is an extensive laboratory for the daily examination of the waters used within the city and the surveillance and control of the drinking waters.

A description of all of the elements which go to make up this most important institution is not practicable but a few of the more important features may be mentioned.

There is, for example, a section of social hygiene where may be seen exhibits touching upon the fight against tuberculosis in the habitations of the poor and in factories; the results of alcoholism; refuges for young children, and the methods for personal care of the body.

Then, there is a section devoted to the science of sanitation of cities, including that which relates to food and water and to the disposition of waste of all kinds, including the uses to which waste products may be put. In this section are also shown methods bad and good, for the cleansing of streets and open places in a city and, of not a little importance in cities where wild animals are kept in zoological gardens or in parts of public parks, there are illustrations of methods of deodorizing such places and of utilizing the substances which in most places of this description render the air impure to considerable distances and are a source of expense in removal.

Another feature is the section for the prophylaxis of contagious diseases and this includes the subject of public and private disinfection, vaccination, control of food material and transportation of sick. Still another section includes the hygiene of hospitals, prisons, barracks, hotels and public halls. Again, there is the section for the hygiene of markets, of establishments for preservation of food substances, such, for instance, as cold storage, the exhibition of fraudulent substancss and means for their suppression.

These are but a few of the divisions in this important museum but they are suggestive of the broad plan on which it is founded. Such a museum, with which should be associated laboratories such as are now established by boards of health in many cities, should find a conspicuous place in every American town of considerable size where its effect would unquestionably be most salutary upon the community in which it should be located.

BLOOD PRESSURE.

It is only within the last few years that the internal medicine man has appreciated the importance of the blood pressure variations and their relationship to disease conditions. Indeed, much of its significance remains yet to be interpreted, but inasmuch as many careful clinicians are engaged in the work of observation, and are tabulating results, soon we should have a clearer comprehension of its meaning.

Points in favor of such research are: That it is easily carried out; the apparatus is not particularly cumbersome nor expensive; the work is interesting and results are ofttimes immediately applicable, since the observations usually are made upon the patient.

The writer has been engaged upon these observations some two years, and his conclusions conform fairly closely with those of other observers. Some of these may be stated thus: That blood pressure varies somewhat from time to time in perfectly healthy persons, even under like conditions, and in disease is subject to more frequent and greater variations, hence conclusions should not be based upon insufficient evidence.

In healthy individuals the tissue resistance and the resistance of the arterial coats are about equal, therefore negligible; hence blood pressure determined by the usual method of the inflatable wide cuff over the brachial artery is fairly accurate.

That the rise of about 1 m.m. a year, which begins shortly after the third decade, is physiologic, or, rather, should be classed as decadent, inasmuch as it indicates the retrograde changes common to humanity.

That a rise of blood pressure is not an invariable accompaniment of arterial sclerosis, as the writer has seen a number of instances in which it is absent.

The resistance of the arterial coats in sclerosis acts as an obstacle to the accurate determination of the pressure, the latter probably being less than indicated by the apparatus, but the error can not be greater than the difference between the arterial and the venous pressure as determined in the same arm at the same time; the venous pressure probably being slightly below the true arterial pressure.

That sclerotic changes in the kidneys are not always accompanied by rise of blood pressure. Forms of nephritis affecting the glomeruli very generally occasion a rise, while those affecting the tubules may or may not be accompanied thereby.

That the rapid rise and maintained high pressure met with in uremia, Stokes-Adams syndrome, angina, migraine seizures, and other painful spasmodic affections, are very probably due to vasomotor spasm, since both pain and symptoms ameliorate with the fall of pressure.

That the states of the blood pressure in uremic coma and in opium coma are an aid to their differentiation, often valuable in hospital practice.

That there is ground for the widespread belief that potassium iodide influences favorably the vascular sclerosis accompanied by high pressure and that its long continued use permanently diminishes the pressure, hence it is fair to assume that the drug reduces or retards fibroid change.

That in certain cases of nephritis and in some heart lesions the administration of digitalis is not accompanied by a rise of blood pressure, and that in these instances improvement usually does not follow its use; indeed, the bad symptoms often are intensified; hence the state of the blood pressure and the manner in which it is influenced by digitalis, are fairly safe guides as to the indications for the drug.

That intra-peritoneal injections of adrenalin will often raise the pressure and improve the condition when digitalis fails, particularly in renal insufficiency.

That the spasmodic rises and falls of

pressure encountered in many individuals during the third and fourth decades, especially in persons who consume proteins largely, are peripheral, probably occasioned by the presence in the circulation of some irritant or toxic substance, though this can not be proved. The writer believes that this condition often is a premonition of Bright's disease and is amenable to correction.

The introduction of fluids—intravenous or into the cellular tissue—is followed by a rapid rise, followed quickly by a fall, the interval depending upon the amount and rapidity of the injection.

Much work remains to be done, but sufficient knowledge already has been accrued to demonstrate fully to the internal medicine man, as well as to the anesthetist and to the surgeon, the value of routine determination of blood pressure. K.

THE TREATMENT OF INGUINAL HERNIA IN INFANCY.

Inguinal hernia is very often seen in infants under two years, and is then, according to most authors, either congenital or infantile in type. In the large majority of cases the hernia is small, generally not larger than a walnut and does not enter the scrotum. Of course, in these cases, a simple truss with a light spring, or even a skein of yarn will be enough to hold them in place. Trusses are remarkably well born by infants, in fact the only difficulty being to keep the skin from being abraded. Careful examination by the mother or nurse will generally suffice. If the region is kept dry and powdered occasionally, and the truss removed as soon as any pressure sore is noted, there will be little difficulty. It may even not be necessary to keep the truss on at night, especially if the child does not cry very much. It is not these cases that are hard to treat. Very often, however, we see hernias of large size that come down into the scrotum, so large, in fact, that no truss will hold them back when the child cries. In these cases there is not only the ever present danger of strangulation, but there is no doubt but that the general health is impaired thereby. Children with these large hernias are generally poorly nourished and fretful. They take their food badly and often there is a certain amount of vomiting and constipation. Any truss that is fitted in these cases has to be put on very tightly to prevent the hernial contents from slipping down into the scrotum, and the skin very early becomes abraded and ulcerated. Of course, when the skin is not in good condition, a truss cannot be tolerated, and then the hernia remains constantly in the scrotum.

It is the author's opinion that practically all of these large hernias should be operated upon. There seems to be an idea, held by many surgeons, that this is an exceedingly dangerous proceeding in infants less than a year old. From the cases personally observed and operated upon by the author, this idea does not seem to be well grounded. The greatest danger lies in the anæsthetic, but if this be given carefully and only primary anæsthesia produced, the danger is very slight. Another danger is from soiling the wound, by allowing the diapers, soaked with urine, to lie over the lower abdomen. This is very easily avoided. It is the author's custom to dress these hernia wounds with simply strips of gauze, soaked in collodion, so that no moisture can penetrate. The diapers are watched constantly and removed as soon as they are found to be wet. By the observance of these rules, primary union is practically always obtained.

The Bassini operation is the one to be used and is done almost exactly as in the adult, with the exception that fewer deep sutures need be used and that these sutures need not be very heavy. In the last case operated upon by the author, an infant of nine months with a scrotal hernia the size of a goose egg, three deep sutures were used internal to the cord and one above. The wound sealed with colloidion, healed by primary union and the child left the hospital on the ninth day. The temperature by rectum reached 101° on the second day after operation, fell to normal the following day and was never above that during its subsequent stay in the hospital. Of course, when a child is not old enough to walk, it is not necessary to confine him to bed for more than a few days after operation.

J. P. H.

POST-OPERATIVE TREATMENT OF DIFFUSE PERITONITIS.

There are certain points in the treatment of diffuse peritonitis which are used as a routine, and which are fixed by rule. There are others, however, about which a great diversity of opinion exists. In practically all cases, no matter what the causative factor may be, the patient, on being returned to bed from the operating table, is put into the upright or Fowler's position. Proctolysis is instituted, either by a continuous drip of hot saline solution or small eight ounce enemas are given every hour and later every three hours. Food by mouth is practically always interdicted, although water in teaspoonful doses is sometimes allowed in order to keep the mouth moist and partially alleviate the thirst. Vomiting is generally controllable by washing out the stomach, unless some definite contraindication exists, such as a gastric ulcer.

There still remains a distressing train of symptoms which is very frequent and extremely hard to treat. Everyone actively engaged in surgery sees often enough, cases of diffuse peritonitis from a perforated appendix, for instance, do fairly well for the first twenty-four hours. The temperature comes down slowly, the pulse is of fair quality and only slightly accelerated, there is little nausea and vomiting, the wound seems to be draining well and the patient declares himself to be feeling better. Yet he will complain of pain traveling from one side of the abdomen to the other and will say that he cannot pass enough flatus to give him relief. When the abdomen is exposed it will be found bulging and rather hard. In other words, the patient is suffering from tympanites or distention. If this be allowed to continue, the pain becomes worse, the abdomen more prominent, no fæces or flatus is passed, and vomiting begins again. The patients condition gets rapidly worse, but he does not present the picture of one suffering from a virulent bacterial infection. Quite the contrary, in him we note the same symptom complex that we see so often in a patient suffering from a mechanical intestinal obstruction. The cause is different in the two pictures, but the symptoms, the course, and the results are the same.

It is in combating this train of symptoms that two diametrically different methods are used. There are many good surgeons who, in cases of general peritonitis from a perforated appendix, will try to diminish the peristaltic action of the intestines as much as possible. The stomach is washed out, but nothing allowed to remain in it. Abdomidal distention is combated from below by the use of the different medicated enemata, or colon irrigations, and pain is relieved by small, repeated doses of morphine. The other, more daring method of treatment is entirely different. While the patient is still under the anæsthetic, after the operation is finished, a stomach tube is passed, the stomach washed out and one or two ounces of a strong saline cathartic, like magnesium sulphate, introduced and allowed to remain. This is generally not vomited up and is followed in about ten hours by another strong cathartic, for instance, five to ten grains of calomel. This often suffices to start peristalsis, and one or more stools with a large amount of flatus may be passed. There is then no distention, no nausea or vomiting and the patients general condition improves forthwith. If the bowels do not move within six to eight hours after the second cathartic, a third one may be given.

When one can observe a number of peritonitis cases treated by these methods, the superiority of the latter is very noticeable. After one has succeeded in getting the first movement of the bowels, the change in the picture is surprising and the patient is practically out of danger. In most cases there are daily movements of the bowels, afterwards, without catharsis. The temperature comes down gradually, if the wound drains well, the pulse comes down generally more rapidly and the distention does not reappear. When this treatment is used as a routine general peritonitis loses much of its terror, simply because paralytic ileus does not occur. J. P. H.

EDITORIAL NEWS ITEMS.

The North Carolina Medical College Commencement.

On the evening of May 6th the graduating exercises of the North Carolina Medical College were held in the Academy of Music, Charlotte, N. C.

Dr. A. A. McGeachy, pastor of the Second Presbyterian church of Charlotte made the invocation, after which the President of the College, Dr. J. P. Munroe, introduced Maj. J. C. Hemphill, editor of the Charlotte Daily Observer, who delivered a strong, helpful, and interesting address to the graduating class.

A larger and more enthusiastic audience never filled the Academy of Music on an occasion of this kind, than the people who congregated there to hear Maj. Hemphill's address and to see this class receive their diplomas. This class contained the first lady graduate of the institution—Miss Portia Mary McKnight, of Siler City, N. C.

The awarding of the diplomas and the announcement of distinctions followed the address. The class history by Miss McKnight was then given and the class prophecy by Robert Franklin Quinn.

The twenty-four doctors who received their degrees were: Jesse Romulus Ballance, of Fremont; Justus J. Bunn, of Concord; Ira Samuel Gambill, of North Wilkesboro; Frank Bernard Garrett, of Rockingham; Eddie Hollingsworth, of Roeboro; Glenn Long, of Catawba; Espy Eugene Little, of Statesville; Jonathan Edward Lucas, of Chesterfield, S. C.; Oscar Lee McFayden, of Fayetteville; Miss Portia Mary McKnight, of Siler City; Richard Earl Martin, of East Bend; Clyde Richard Nicholson, of Hamptonville; Reid Patterson, Jr., of Statesville; Clyde Phillips, of Chinquapin; M. B. Raymer, of Eufola; Jake Henry Rozzelle and Ralph Colver Sadler, of Charlotte; Lee Roy Sammands, of Hamptonville; Allie Lee

Stowe, of Lowell; F. W. L. Tydeman, of Amsterdam, Holland, and Marcus Branch Wilkes, of Maxton.

After the exercises at the Academy, there was a smoker tendered the members of the graduating class, and the local and visiting physicians, at the Southern Manufacturers' Club.

The commencement exercises of the South Carolina Medical College will be held in the Academy of Music at Charleston on June the 3rd.

Dr. D. W. Daniel, of the faculty of Clemson College (S. C.) has accepted the invitation to deliver the annual address.

The Anderson County Hospital at Anderson, S. C., was destroyed by fire on April the 25th. The institution was only four years old. It was a three-story, brick building, which cost about $50,000. At the time of the fire there were twelve patients in the hospital, all of whom were rescued.

At a called meeting of the directors of the Anderson Hospital Association on April the 26th plans were discussed for the rebuilding of the hospital in the near future, and it will be only a few days until a larger and better hospital will be well under way.

The South Carolina Medical Society Meeting.

The sixty-fourth annual meeting of the South Carolina Medical Association was held in Columbia on April 16, 17 and 18.

The programme and list of officers follows:

OFFICERS.

J. W. Jervey, president, Greenville; A. E. Baker, first vice president, Charleston; J. H. Miller, second vice president, Laurens; H. B. Lee, third vice president, Summerville; C. P. Aimar, treasurer, Charleston; Edgar A. Hines, secretary, Seneca.

COUNCILORS.

First district, J. T. Taylor, Adams Run; second district, W. P. Timmerman, Batesburg; third district, G. A. Neuffer, Abbeville; fourth district, J. F. Williams, Roebuck; fifth district, M. J. Walker, Yorkville; sixth district, J. A. Faison, Bennettsville; seventh district, F. M. Dwight, Wedgefield; eighth district, P. G. Croft, Aiken.

The delegates to the American Medical Association are: J. F. Dawson, 1912, Charleston; Edgar A. Hines, secretary ex-officio, 1912, Seneca; R. S. Cathcart, alternate, Charleston; R. A. Marsh, alternate, Edgefield.

The committee on arrangements of the Columbia Medical Society: J. H. McIntosh, chairman; W. A. Boyd, R. L. Moore.

Committee on Scientific Work: J. T. Taylor, chairman, Adams Run; W. A. Boyd, Columbia; Edgar A. Hines, secretary ex-officio, Seneca.

Committee on Public Policy and Legislation: A. B. Knowlton, chairman, Columbia; W. A. Tripp, Easley; R. S. Cathcart, Charleston.

Committee on the Prevention of Venereal Diseases: T. P. Whaley, chairman, Charleston; Davis Furman, Greenville; C. W. Barron, Columbia.

Committee on Necrology: S. C. Baker, chairman, Sumter; T. A. Quattlebaum, Columbia; J. L. Folk, Brunson.

Sim's Memorial Committee: T. Grange Simons, chairman, Charleston; C. W. Kollock, vice chairman, Charleston; S. C. Baker, secretary-treasurer, Sumter.

PROGRAMME.

Place of Meeting: Hall of the House of Representatives. The State House.

The House of Delegates convened April 16, at 10 a. m.

The council met at 8:30 p. m., April 16, at the Colonia hotel.

HOUSE OF DELEGATES.

The general order was as follows:

Called to order by president at 10 a. m.

Appointment of committee on credentials.

Report of treasurer.

Report of secretary.

Report of scientific committee.

Report of the committee on public policy and legislation.

Report of the State board of health.

Report of the State board of medical examiners.

REPORT OF THE COUNCILORS.

First District—J. T. Taylor.
Second District—W. P. Timmerman.
Third District—G. A. Neuffer.
Fourth District—J. F. Williams.
Fifth District—M. J. Walker.
Sixth District—J. A. Faison.
Seventh District—F. M. Dwight.
Eighth District—P. G. Croft.

Report of delegates to the American Medical Association.

Report of committee on necrology.

Report of the Sims' memorial committee.

Report of the committee on study and prevention of tuberculosis.

Report of the committee to collect and preserve the records.

Introduction of new business.

Miscellaneous business.

OFFICIAL PROGRAMME.

Scientific Session—Wednesday, April 17, 1912.

Morning Session—First Day, 10 a. m.

Called to order by the president, J. W. Jervey.

Divine Invocation—Dr. Jas. O. Reavis.

Address of Welcome—Wade Hampton Gibbes, mayor of the city.

Address of Welcome—Dr. H. W. Rice, president of the Columbia Medical Society.

Response—President J. W. Jervey.

President's address, "The Medical Profession and the Public Health"—Dr. J. W. Jervey, Greenville.

"Kidney and Ureteral Calculi"—Dr. Jos. Hume, New Orleans, La.

"Inguinal Hernia, Operative Treatment vs. the Truss"—Dr. C. F. Ross, Anderson.

"Remarks on Twenty-three Consecutive Cases of Gunshot Wounds of the Abdomen with Two Deaths"—Dr. LeGrand Guerry, Columbia.

"Bronchoscopic Extraction of Foreign Body from a Bronchus"—Dr. E. W. Carpenter, Greenville.

"Anterior Poliomyelitis"—Dr. Charles Geer, Greenville.

"Some Remarks on the Eye, Ear and Throat in their Relation to Some General Diseases"—Dr. Edward F. Parker, Charleston.

"A Pregnant Fibroid Uterus with Delivery at Term"—Dr. J. H. Britt, Princeton.

"The Role of Drainage"—Dr. H. W. Rice, Columbia.

"Investigation of Sources of Typhoid Fever"—Dr. F. L. Parker, Charleston.

Special order at 12 m., Wednesday, April 17.

Address, "A New Method of Further Reducing the Operative Mortality in Major Surgical Operations"—Dr. Geo. W. Crile, Cleveland, Ohio.

The association adjourned at 1:30 p. m. Reconvened from 3:30 to 6 p. m.

"The Surgical Treatment of Stone in the Bladder of Children"—Dr. R. T. Ferguson, Gaffney.

"Complete Prolapse of the Uterus, Complicated with Pregnancy"—Dr. J. C. Harris, Anderson.

"Preventive Medicine in Private Practice"—Dr. Fillmore Moore, Aiken.

"Some Neglected Factors in the Etiology and Treatment of Enteritis,"—Dr. F. M. Durham, Columbia.

"Medical Ethics"—Dr. Davis Furman, Greenville.

"Tumors of the Bladder"—Dr. A. B. Knowlton, Columbia.

"Auto-Inoculation in Pulmonary Tuberculosis"—Dr. C. F. Williams, Columbia.

"Some Recent Observations on Salvarsan"—Dr. C. W. Barron, Columbia.

THURSDAY, APRIL 18.

Called to order by President J. W. Jervey at 10 a. m.

"Contribution on Hare-lip Surgery"—Dr. A. E. Baker, Charleston.

"The Medical and Surgical Treatment of Gall Stones"—Dr. Joseph Graham, Durham, N. C.

"Conservatism in the Management of the Ear, Throat and Nose, Including the Accessory Sinuses"—Dr. C. W. Kollock, Charleston.

"Treatment of Some Cases of Diseases of the Posterior Urethra"—Dr. P. C. Mikell, Columbia.

"Female Reflexes"—Dr. C. D. Rollins, Lake City.

"The Effects of Sugars and High Per Cent. of Proteids Upon Fermental Disorders of Children"—Dr. William Weston, Columbia.

"The Necessity for Country Medical Associations in Relation to Medical Legislation"—Dr. A. Moultrie Brailsford, Mullins.

"A Condensation of Some of the Cranial Nerves in the Eye, Nose and Throat Diseases"—Dr. L. O. Mauldin, Greenville.

"Fracture of the Femur with a Report of Cases"—Dr. L. A. Griffith, Columbia.

"New Method of Operating for Typhoid Perforation"—Dr. L. B. Owens, Columbia.

"Chronic Follicular Conjunctivitis: Its Prevalence in the Schools; How Treated to Trachoma; Treatment"—Dr. C. L. Kibler, Columbia.

"Vaccines"—Dr. C. W. Barron, Columbia.

Announcements.

Presentation of the next president.

Dr. E. A. Alderman, president of the University of Virginia,delivered an address at the Columbia theatre Thursday evening, April 18, 8:30 p. m. Subject, "The Medical Man and His Service to the State."

MEETING MEDICAL SECRETARIES.

Programme of 64th annual meeting of the South Carolina Society of Medical Secretaries, Columbia, April 17, 1912, at 8:30 a. m. in the private dining room at Colonia hotel; breakfast; business; election of officers; informal talks. Officers: Chairman, Dr. C. C. Gambrell, Abbeville; secretary-treasurer, Dr. L. Rosa H. Grant, Spartanburg.

AMENDMENT TO CONSTITUTION.

Dr. F. M. Dwight gave notice of amendment to the constitution to provide that ex-presidents of the State association be members at large of the house of delegates.

Marriages.

Dr. J. Rush Shull, of Henrietta, N. C., and Miss Eula Mai Haynes,.of Cliffside,N.

C., were married in the first Baptist church of Cliffside on April 24th.

Dr. Shull is a native of Shelby, N. C. He is a graduate of the University of North Carolina, and also of the University of Pennsylvania. He is a young physician of great intelligence and ability.

Dr. J. Frank Cranford, of Hendersonville, N. C , and Miss Queenie Mobley, of Columbia, S. C., were married on April the 25th.

Dr. Cranford is a young physician of great ability.

Deaths.

Dr. W. B. Hunkapiller, of New Hope, Ala., died on April the 13th. He was 40 years of age, and was quite popular in his profession. Bronchial pneumonia was the immediate cause of his death.

Dr. E. C. Addison, of Fairfax, S. C., died in his office on April the 14th. He had been practicing medicine in Fairfax for about six years, and was a highly esteemed citizen, and a prominent physician of that section.

BOOK NOTICES.

Ophthalmic Myology. A Systematic Treatise on the Ocular Muscles. By G. C. Savage, M.D., Professor of Ophthalmology (Defects of the Eye) in the Medical Department of Vanderbilt University, Author of "New Truths in Ophthalmology," and "Ophthalmic Neuro-Myology," Ex-President of the Tennessee State Medical Association, Ex-President of the Southern Medical Association. Eighty-four illustrative cuts and six plates. Second Edition. Published by the Author, 137 Eighth Avenue, North, Nashville, Tenn. Printed by McQuiddy Printing Co., Nashville, Tenn.

On account of the great demand for the first edition of this work the author has deemed it wise to give to the medical profession a second edition. To the first chapter the author has added ninety-one pages. One hundred and thirty of the one hundred and forty pages of this chapter have been newly written. To this chapter has also been added twenty-three new illustrative cuts.

No book on the ocular muscles, except this one and its companion volume, "Ophthalmic Neuro-Myology," has been based on the fundamental principles set forth in the first chapter of this book.

The practical chapters, II to XII, have had such corrections and additions made to them as appeared necessary in order to make them clearer and stronger. This is especially true of chapter III, to which four pages have been added. Everything taught in these chapters is based on the fundamental principles set forth in chapter I; and the value of every proceedure advocated has been established by abundant practical experience.

This volume contains 685 pages of carefully indexed reading matter. It is substantially bound and from the publisher's standpoint the book is quite complete, and its illustrations are both attractive and instructive.

It gives us a great deal of pleasure to recommend this work to our readers.

"What a Father Should Tell His Little Boy"; "What a Father Should Tell His Son"; "What a Mother Should Tell Her Little Girl"; "What a Mother Should Tell Her Daughter." By Isabelle Thompson Smart, M.D., Medical Examiner of Defective Children, Department of Education, City of New York; Special Lecturer New York Normal School of Physical Education; Member American Academy of Political and Social Science; Member Woman's Society for the Prevention of Crime; Fellow New York Academy of Medicine; Member American Medical Association. Published by The Badmer Co., New York.

This series of books deal with the mysteries of life, and the author has dealt with the subject in such a way as to make the meaning clear to even a very small child. The author has based her books for the "Little Girl" and the "Little Boy" on the Story of Life and its Reproduction. This is done in a most intelligent manner, and we feel that all mothers should have copies of these books.

The other two books, "What a Mother Should Tell Her Daughter" and "What a Father Should Tell His Son," are also worthy a place in every family library.

This work is bound in four separate volumes. They are attractive in appearance, and while small in size, they contain an immense amount of information, and we take great pleasure in recommending this work to our readers.

Compendium of Diseases of the Skin. Based on an Analysis of Thirty Thousand Consecutive Cases with a Therapeutic Formulary. By L. Duncan Bulkley, A. M., M. D., Physician to the New York Skin and Cancer Hospital; Consulting Physician to the New York Hospital; Consulting Dermatologist to the Randall's

Island Hospital, to the Hospital for Ruptured and Crippled, and to the Manhattan Eye and Ear Hospital, etc. Fifth Revised Edition of the Manual of Diseases of the Skin. 8vo., Cloth, 300 pages. $2.00 net. Paul B. Hoeber, Medical Publisher, Bookseller and Importer, 69 East 59th Street, New York. 1912.

It has been fourteen years since the Author last published his famous "Manual of the Diseases of the Skin." In that time considerable progress has been made in the science of Dermatology, necessitating practically a re-writing of the original text, besides many additions. The book is essentially a practical one intended for the use and guidance of the general practitioner. Diagnosis and treatment are therefore specially emphasized, and neither time or space is wasted on the rare skin diseases which are of interest only to the specialist

An up-to-date therapeutic Formulary of reliable prescriptions is added, and will in itself be found worth more than the price of the book.

The book is offered to the profession for exactly what its title indicates: A "Compendium of Diseases of the Skin," up-to-date, concise, authoritative and rational. The reputation of the author is alone sufficient guarantee that the book will live up to its aims.

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The Lesson of the "Titanic."

While it may be that the Titanic's equipment of life boats, life rafts, and life preservers was technically within the requirements of the law, it is quite evident that it is not a safe thing for any vessel to undertake an ocean voyage with safety appliances that can, under no circumstances, provide for more than one-third of the number of human souls she carries. The survivors are almost exactly one third of those on board the ill-fated vessel. We must infer that the remainder went to their death because there was no adequate provision for their safety. Late last summer a heated debate took place in the British Parliament over a bill proposing to compel the White Star line to provide enough lifeboats and rafts on each of its ships to carry all its passengers and crew, but, said the despatches, "pressure was brought to bear so that the bill was pigeonholed." Experts on shipbuilding are now telling us that an unsinkable ship is an impossibility. There ought to be, it would seem, an investigation by the United States Government, of this terrible calamity, which has brought to a watery grave, two miles below the surface of the Atlantic Ocean, 1500 human beings and $15,000,000 worth of property. Resolutions have been introduced in both Houses of Congress calling for a rigid investigation. A demand also has been made in the House of Representatives at Washington and in the House of Commons at London for some action by the next Hague conference, which shall result in the agreement upon a lifeboat code and a treaty of uniform observance binding upon every contracting power. —From "The Tragedy of the 'Titanic' and Its Lesson," in the American Review of Reviews for May.

Author Victim of Titanic Disaster.

The literary world was shocked and grieved when it was learned that Jacques Futrelle the novelist, whose stories *The Diamond Master*, *The High Hand*, and *Elusive Isabel* won for him thousand of admirers, was among those lost in the wreck of the Titanic. Mrs. Futrelle, who since the publication last fall of her first novel, *Secretary of Frivolous Affairs*, has also gained fame as a writer, is among those saved, her gallant husband remaining behind that the women and children might be given their chance for life.

The Futrelles have long been well known in American literary circles, Mr. Futrelle beginning his career as a newspaper writer. It was while working as a special writer on Atlanta newspapers some years ago that he met Miss May Peele, a society girl who a short time before had been graduated from college. Their's was a case of love at first sight and it is said by those who knew them best, that their married life has been one long honeymoon.

Since Mr. Futrelle left the newspaper business to devote himself entirely to fiction writing, the family has resided at Sictuate, Massachusetts, their home, "Stepping Stones," being widely known among people of literary and artistic bent. It was here that Mr. Futrelle did all of his work, and that Mrs. Futrelle wrote *Secretary of Frivolous Affairs*, which is generally conceded to be one of the best society novels written in many a day.

The Futrelles, ever since their marriage, have been of mutual help to each other, and although for years Mrs. Futrelle did not write at all, she was a woman of fine literary tastes, and her criticisms and suggestions were of invaluable aid to her husband. Realizing that his wife was possessed of unusual genius, Mr. Futrelle suggested that she write something herself, and this she did, beginning with short stories. She was immensely successful along this line, selling her first story to a magazine. This created a demand for more and finally Mrs. Futrelle decided to try her hand at novel writing. The result was *Secretary of Frivolous Affairs*, which sprang into immediate popularity and which is still greatly in demand.

It is said that both Mr. and Mrs. Futrelle were preparing to write new novels and last fall, after the publication of *Secretary of Frivolous Affairs*, they went to Europe. The winter was spent in Italy, and their return to America was delayed somewhat in order that they might sail on the Titanic.

THE BOBBS-MERRILL COMPANY.
April, 1912.

The Bookman for May, 1912.

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Are We Too Liberal With Pensions?

While no one will begrudge a liberal pension to any veteran or surviving dependent of a soldier wounded in the service of his country, it seems intolerable that forty-six years after the close of the Civil War the enormous sum of $153,682,000 should be spent in a single year for pensions. In 1909 the pension list cost $164,826,287.

Since 1890 our pension appropriations have been in excess of $100,000,000 annually, and since 1908 in excess of $150,000,000. If the so-called Sherwood bill becomes a law, more than $225,000,000 will be necessary to meet our pension budget for the fiscal year ending June 30, 1913.

These figures are the more impressive when we consider the military pension appropriations of various European countries. In 1910 our pension expenditures amounted to $162,631,729.94. For the same year England expended $29,397,278; France expended $31,960,607; the German Empire, $40,805,814; Austria, $20,531,668; Hungary, $6,498,737. The total expenditures of these five European nations for that year combined were $129,194,094, or $33,000,000 less than those of the United States alone.

For 1911, the survivors of the Civil War on the Union side drew pensions aggregating $148,231,665, while in the Southern States the survivors of the Confederate side drew but $5,780,833. In Virginia the Union veterans in that year drew $1,489,553, while the Confederate veterans drew but $450,000. In Louisiana the sum of $1,024,613 was disbursed among Union veterans, and but $175,000 among the Confederate veterans.

Not the least objectionable feature of our pension system is the fact that from twenty-five to thirty per cent. of our pensioners enjoy an annual net income of more than $1,000. In the Southern States the pension roll is based primarily upon need. Yet despite the liberality, the extravagance of our general pension system, the sixty-first Congress, which adjourned March 4, 1911, enacted 9,649 bills granting original or increased pensions by special act.

In 1872 President Garfield, then a member of the House of Representatives, said: "We may reasonably expect that the expenditures for pensions will hereafter steadily decrease, unless our legislation should be unaccountably extravagant."

The pension list for 1872 amounted to $30,703,999. In 1912, forty years later, we are devoting $153,682,000 to this item—five times that amount. Our pension appropriations from 1866 to 1911 have amounted to the staggering total of $4,254,816,147, or almost a billion dollars more than the total expenditures of the government during the years of war. And despite these enormous expenditures the House of Representatives has within the past few months passed a general pension bill calling for an additional annual appropriation of $75,000,000, at a conservative estimate. This bill is now pending in the Senate.

Our largest single expenditure is for pensions. Twenty-three cents of every dollar spent by the government goes for this purpose. This is a charge of $8.60 against every family in the United States. Is it not time to take some action to protect the treasury of the nation?—From "How Congress Squanders Our Money," by Hubert Bruce Fuller, in May Lippincott's.

Abstracts of the Leading articles of the month.

Household Syphilis,—Nixon (Bristol Med. Chir. Jour,. says that the transmission of syphilis by other means than sexual intercourse is probably commoner than we are wont to suppose. Syphilis spreading in the home by nonvenereal contagion is what has been called syphilis economica or syphilis of the household. It is from the recognition os acquired syphilis in children that the spread of syphilis in the family is most commonly detected. As a rule adults are rightly or wrongly assumed to have been infected by venereal contact, and some practitioners regard acquired syphilis in children as being commonly the result of a criminal assault. Syphilis economica is the true explanation of no small proportion of cases occuring in children, and extragenital chancres about the mouth in adults, as well as in children, are more often than not due to infection from food utensils; especially is this the case when the primary sore is situated on the tongue or tonsil.

Nervous Vomiting in Childhood,—Smith in the London Lancet., mentions a type of nervous vomiting in children, of which he briefly cites a number of cases. The principle features are painless, effortless vomiting, occurring directly after meals, without alteration in the general health, and having its origin in children of nervous habits or inheritance. The child with chronic intestinal dyspepsia, or mucous disease, generally wastes, has epigastric pains and other symptoms, but rarely vomits. In cerebral tumor there may be effortless, painless vomiting, but it has no direct relation to meals; headache is usually persistent and severe, and later there will be optic neuritis, and perhaps localizing symptoms. The regular and daily nature of the sickness easily distinguishes it from that large group of cases of cyclical or periodic vomiting which are dependent on sundry autointoxications or are manifestations in the child of migraine. Vomiting due to any intra-abdominal lesion should be easily recognized by a careful examination. Treatment resolves itself into an elimination of all causes that may aggravate the underlying nervous instability. Removal from unsuitable home surroundings and the application of a little firm moral control will often effect a cure. In obstinate cases the same treatment as is applicable to lienteric diarrhea—small doses of arsenic and opium given just before meals—has in the author's experience always proved immediately efficacious.

Thymic Asthma and Thymic Death in Children.—Ssokolow (Arch. f. Kinderhk.) has studied the thymus gland at different ages, of published cases of thymic disease, and of the evidence concerning the relationship of this organ to certain cases of asthma and sudden death. The Dr. considers that under normal conditions there is a growth of the thymus gland during extrauterine life. The growth is most rapid up to the sixth year and more gradual between this time and the twelfth to the fourteenth year. From this time the glandular tissue begins to be replaced by fat and connective tissue. Although the gland has a definite weight even to old age, it loses its physiological significance. The size of the thymus gland is generally in direct ratio to the nutritional condition of the child. The removal of the thymus in animals causes an increase in the number of red blood cells, no changes in the white cells, and no other important changes in the organism. The thymus is in functional relationship with other glands of internal secretion; spleen, thyroid and testicle. It has a close relationship to the thyroid. The injection or squeezing of thymus juice into the circulation of animals is capable of causing death with a slowing of the pulse and a fall of blood pressure. Ssokolow believes that feeding the thymus has a therapeutic worth and in many cases can replace the thyroid for this purpose. He believes that the thymus has a special significance in the growing organism and that its internal secretion is important in the metabolism of growth. The author does not believe that the function of the gland is specific, but that to a certain extent it can be performed by other organs. The writer concludes that thymus enlargement is not the direct cause of sudden death. These cases are due to some pathological condition of metabolism which is responsible for the enlargement of the thymus as well as of other glands. Ssokolow believes, however, that there is a type of asthma which is in direct relationship with a thymic enlargement. But this condition must be carefully separated from other conditions which give very similar clinical manifestations.

Pharyngeal Suppuration.—Badgerow, in The London Medical Lancet, says that pharyngeal suppuration, according to its seat of origin, may be: (1) Lymphoid; (2) submucous; (3) subaponeurotic; (4) prevertebral. Although suppuration arising in the lymphoid tissue of the pharynx is by far the commonest seat of infection, it is seldom that we find any large collections of pus in this layer of the pharyngeal substance. In acute lacunar tonsillitis the crypts may contain pus which either confines itself to the separate lacunæ or spreads as a false membrane over the tonsillar surface. Suppuration originating in the submucous tissue of the pharynx is the form which most often presents itself to the surgeon, and is best exemplified by peritonsillar abscess. The most prominent symptom in all submucous affections is dysphagia. This is due partly to the presence of the swelling, but mostly to the pain caused by pressure on delicate nerve endings. Trismus is also largely reflex in order to prevent pain. To suppuration occurring in the space between the pharyngeal aponeurosis and the prevertebral fascia some writers would confine the term retropharyngeal abscess. The term subaponeurotic suppuration would include not only an abscess originating in the deep cervical glands and presenting at the back of the pharynx, but also the particular form of submaxillary phlegmon known as angina Ludovici, while it would exclude an abscess the origin of which was due to caries of the cervical vertebræ or caseation in the postpharyngeal gland. Prevertebral suppuration is that with which the name of retropharyngeal abscess is almost always associated in the mind of the general practitioner.

Vaccine Therapy in Diseases of the Eye.—Bryan, in The British Medical Journal, says that in recent years the two most important methods of dosage which have been employed in using tuberculin in eye disease are: (1) Wright's method, commencing with a small dose, 1-80000 to 1-10000 milligram, gradually increasing the dose over a long period of treatment with about ten days' interval between each inoculation, the dosage being regulated by estimations of the opsonic index, and (2) von Hippel's method of treatment with tuberculin T.R., commencing with an initial dose of 1 500 milligram, repeating the inoculation on alternate days, increasing each time by 1 500 milligram until 1-50 milligram is reached; after this the dose is increased each time by 1-50 milligram up to 1-5 milligram; then by 1-10 milligram until a dose of 1 milligram is reached. During the treatment the temperature should not rise above 100° F.; if it does so, the previous dose, or a smaller one, is repeated until there is no rise of temperature after the inoculation. The Dr. has used Wright's method, regulating the treatment partly by estimation of the opsonic index, partly by observation of clinical signs and symptoms, temperature, amount of pain and photophobia, effect on vision, and conjunctival injection. The results in the treatment of tuberculous conjunctivitis are good, provided the treatment is persisted in over a long period He has treated one case of tuberculous interstitial keratitis with excellent result. Others have reported favorable results in the treatment of scleritis, sclerokeratitis, and phlyctenular ophthalmia. In internal tuberculosis of the eye the results of treatment by vaccine are good, especially where the iris is the diseased tissue. The iris is favorable for treatment because it has a good blood supply. In tuberculosis of the fundus, where the supply is poor, treatment has to be prolonged and is less successful.

The Treatment of Exophthalmic Goitre.—Kocher (Archiv fur klinische Chirurgie) states that the treatment of exophthalmic goitre is governed by the fact that the thyroid has in all forms of the disease undergone an anatomical change which results in increased function. This applies to the primary form of struma ushered in by nervous symptoms, as well as to long-standing cases of thyroid disease which are later converted into the exophthalmic form, or the toxic or infectious form of strumitis which result in hyperplasia of the gland. There is therefore no basis for carrying out a different treatment in the neurotic forms of the disease than is carried out in the so-called secondary forms of Basedow's disease. The rapid and permanent elimination of the symptoms is dependent on the elimination of the disease from the thyroid gland. Among these conditions an important feature is the early removal of the hyperplasia upon which the overactivity depends. Attention is called to the fact that the leading experts in internal medicine and neurology have been induced by the excellent results which have been obtained by timely and well-carried-out operations to turn over their cases without reserve for the earliest possible operation after diagnosis has been made.

The favorable results which have been obtained by the operative removal of the diseased tissue support the theory of hyperthyroidism in this disease. The etiological factors which are of so much significance in bringing about the symptoms of the disease when properly studied afford many suggestions as to the internal treatment. The importance of these etiological factors in reference to the treatment is shown by the sudden accentuation of the symptoms when the general health becomes run down, when there is great mental worry, during an acute attack of sore throat, or when an empiric undertakes to treat a case by the energetic administration of iodine. On the other hand, mental and bodily rest, as by a fojourn at the seashore, and the avoidance of iodine medication, will produce a cessation and a retrogression of the most acute symptoms. However, the histological changes in the thyroid do not cease under the influence of these measures, and the disease advances under the constant harmful influence of the thyreotoxic gland secretions.

There are still a large number of physicians who undertake to treat Basedow's disease in its early stages with all sorts of medicines, and to send the patients from sanitarium to sanitarium, referring them to the surgeon only when the patient has become convinced of the uselessness of these measures and has lapsed into the miserable condition which characterizes the late stages of the disease. In this state the patient is unable to endure anything; he complains on the least excitement or exertion of fatigue and palpitation of the heart, with a feeling of depression and anxiety, and the surgeon must deny him the operative assistance which he so urgently desires because it is unwise to subject him to the pressing danger of operation. When a toxic condition is clearly seen to be developing from a diseased thyroid, and which will with certainty in time lead to marked organic changes, especially to fatty degeneration of vital organs, as the kidney, liver, and heart, then the only rational and wise treatment is to eliminate the cause of these changes, which is the poisonous substance itself.

If Eppinger and Hess are correct in assuming that status thymolymphaticus is due to excessive vagus action, then a sudden reduction of the activity of the vagus combined with increased function of the sympathetic must exert an unfavorable influence upon the heart and can account for the seuere postoperative tachycardia which sometimes occurs. These cases must be reckoned with even when early operation is done, and the author's method of successive operations is especially to be recommended.

The secretion of the thyroid can be repressed in different ways. Of the operative methods the mildest are the ligation of vessels and the section of nerves. Of the ligations the least disturbing is that of the superior thyroid artery; it produces the least injury to the tissues and can be quickly performed. In the presence of large vessels benefit can be obtained by tying one superior artery, and later on the second may be ligated; later still one-sided excision may be done, and eventually the remaining inferior thyroid artery can be ligated. Instead of ligation of the isolated artery, an easier method is to ligate or cut through the upper pedicle of the gland. This has the advantage that the nerve is cut through, and as a consequence reduction in secretion and atrophy of the gland are brought about. One must not, however, deceive himself that in the severest cases ligation of one or both upper vascular pedicles is to be done without due consideration, for, in the author's experience, out of 17 deaths, five followed simple ligation of the pedicles; but these were all advanced cases.

In cases of colloid goitre which have assumed the exophthalmic form, excision of the diseased portion of the gland is the suitable procedure. Resection of the lower pole of the thyroid constantly involves the danger of tetany through interference with the nourishment of the parathyroids. Those who practice this have a high mortality. After operation the patient should have a long rest, bodily and mental. A stay in a sanatorium is of especial value as it implies the proper dietetic treatment. A very important point is the avoidance of iodine preparations in the postoperative treatment. Of internal medication the phosphorus combinations appear to exert the most favorable influence.

The Treatment of the Vaccination Site with Picric Acid Solutions.—Schamberg and Kolmer, in The London Lancet, give their conclusions as follows:

1. The use of a 4 per cent. alcoholic solution of picric acid upon the vaccinated area forty-eight hours after the insertion of the lymph does not interfere with the success of the vaccination.

2. It is believed that this treatment lessens the degree of the local inflammatory reaction.

3. It is believed that the patients are not so apt to exhibit constitutional disturbance.

4. The epithelial covering of the vaccine lesion is hardened, and there is a decreased liability of extraneous bacterial infection. This is doubtless due in part to the antiseptic properties of the solution applied.

5. It has been determined by laboratory investigation that picric acid is about four times as efficient as phenol as a local antiseptic.

6. The common organisms on the skin are lessened in number by the application of solutions of picric acid.

The Surgical Requirements of Narcosis and the Available Methods.—Buxton (British Medical Journal) says that involvement of the laryngeal nerves increases the danger. There is a complication in goitre cases which is sometimes lost sight of —the tendency these patients have to profuse secretion both from the salivary and tracheal glands. When the thyroid enlargement is associated with the other symptoms of Graves' disease the acme of danger is attained. Chloroform used by the older methods led to, or was associated with, a high mortality, and this led Kocher and others to extol the merits of local injections by Schleich's infiltration method. This plan, admirable though it is in small adenomatous cases, fails to remove one grave factor causing fatality—it does not abrogate either traumatic or psychic shock. Nitrous oxide, even with oxygen, causes too much turgescence, and increases respiratory difficulties. With ethyl chloride the patient is either too deeply or too lightly narcotized; the level of anesthesia can hardly be maintained. Ether given by closed methods undoubtedly increases turgescence, and provokes increase of saliva and mucus, which interfere with breathing. Mrs. Dickinson Berry, who has used an open ether method largely in these cases, insists that with care it can be safely and advantageously employed.

The safest method if ether is used is to inject atropine gr. 1-100, or this together with morphine and scopolamine, half an hour before giving ether by the open method. In this way a certain diminution of the bronchial secretion can in some cases be obtained, but in the experience of the author this dose of atropine will not always prevent solivation, and if it does, it is liable to cause discomfort for hours, owing to the dryness of the mouth and pharynx.

The Dr. has given anesthetics to a large number of cases of goitre, both simple, malignant, and exophthalmic, and has used chloroform in low percentage vapor with a copious stream of oxygen. This plan has so far answered extremely well, and possesses the great advantage that one can readily lighten and deepen narcosis as the steps of the operation demand. Although he has never employed rectal etherization for these cases, he has done so for laryngectomy, but the plan, valuable as an alternative, has inherent objections which make it less useful now that we possess accurate means of giving chloroform in definite percentages.

A Simple and Effectual Means of Administering Salvarsan.—Fowler (Indian Medical Gazette) says that finding the ordinary procedure that is recommended very tedious and troublesome, he tried the mixture of salvarsan with olive oil, and was surprised at the results. The local pain was practically nil, and the patients improved rapidly under the treatment, as is recorded by the injection of salvarsan in saline solution. The procedure adopted is as follows: A Roux's syringe with a short needle of fairly large bore is sterilized by boiling in water. An ounce of pure olive oil is boiled in a small aluminum basin, and the oil is allowed to cool, or if one is in a hurry the basin is put into some cold water.

Two cubic centimeters of oil is drawn up in the syringe with the needle on—the piston is drawn well up to the top and the oil is shaken up, so that the oil adheres to the sides of the glass barrel. The piston is then completely drawn out, a finger being placed on the point of the needle (which is lowermost), so that the oil may not run out;next the salvarsan is thrown into the barrel, and 4 Cc. of oil is poured on the salvarsan direct from the aluminum basin. The piston is then replaced, and as soon as the washer engages the barrel, the syringe is turned up, so that the needle is uppermost. The screwcap which is on the piston rod is then pushed up and screwed home, and the syringe is violently agitated.

The salvarsan mixes with the oil and forms a uniform emulsion. This is injected intramuscularly into the gluteal region.

The points that should be noted are:

1. The piston of the syringe should not be of metal. The syringes supplied for salvarsan injections by chemists are unsuitable for this purpose as the acid salvarsan attacks the metal and the piston jams.

2. The needle must be of wide bore.

3. Care should be taken when the piston is being replaced, the glass barrel being held firmly in its metallic casing with the left hand. The author advises those wishing to try this method to practice it with some simple oil.

4. There should be no hurry in the mixing, as the whole of the salvarsan will mix up with the oil. He has had no caking of the salvarsan in the syringe.

Treatment of Pulmonary Tuberculosis by Inducing an Artificial Pneumothorax.—Rhodes (British Medical Journal) says that the indications for this treatment are: (1) Pulmonary tuberculosis limited almost, if not entirely, to one lung. (2) Recurrent hemoptysis if at all severe. (3) Continued fever, cough, and general increase of disease on one side, while the other lung is healing, or only slightly affected.

Slight inactive disease in the fairly sound lung is not a contraindication. The increase in the blood flow through this lung seems to influence the healing process favorably. In some cases it is impossible to produce a pneumothorax, owing to extensive pleural adhesions.

The operative procedures divide themselves into two distinct stages—the preliminary operation and the after-filling. The patient's chest is examined with the x-rays, and a site for the operation is chosen where the pleura appears thinner and the disease less pronounced. The patient is given an injection of morphine. He lies on his side with a pillow under the sound chest. The skin and subcutaneous tissues are anesthetized with novocaine and adrenalin solution, after careful sterilization of the skin by painting with iodine, etc. The whole operation must be carried out under the strictest aseptic conditions.

An incision is made over the selected intercostal space, and the tissues are separated so that the external surface of the parietal pleura is exposed; this is facilitated by the use of the retractors invented by Brauer and Spengler. When a space about a quarter of an inch square has been defined, bordered by ribs and retractors, and having parietal pleura for its base, the latter is punctured in an oblique direction by a blunt hollow needle. If the operation is immediately successful, one hears a rush of air into the pleural space, and the needle is at once connected with a manometer having a three-way cock, so that nitrogen may be introduced through the needle, while the pressure is measured. The blunt needle and open operation obviate to a large extent the dangers of nitrogen or air embolism and of puncturing the lung tissue. Five hundred to a thousand cubic centimeters of sterilized warm nitrogen is allowed to flow into the pleura or injected under a pressure equal to 2 or 3 cm. of water. The warmed nitrogen obviates the possibility of pleural reflex. If the patient experiences much pain or seems faint, or his condition otherwise deteriorates during this injection, it must be stopped at once, but the idea is to make as large an air bubble in the pleura as possible, so that the after-fillings may be made with greater success and less danger of puncturing lung, adhesions, visceral pleura, etc. After a sufficiency of nitrogen has been introduced, the wound is sewn up, an antiseptic air-tight dressing is applied, the chest is examined again with the x-rays, and the pneumothorax which has been induced is observed and its limits as far as possible defined.

If the blunt needle does not at once tap the pleural space, it may be necessary to pass a gum-elastic sound down its lumen to clear away any obstruction from the orifice of the needle or its immediate vicinity.

Two days later a sharp-pointed hollow needle, either such as that used by Saugman for his operation, or a blunt cannula of similar caliber and length with a trocar which can be removed, is introduced into the nitrogen bubble in the pleura, and a further 500 or 1000 Cc. of nitrogen is injected under a slight pressure (from 3 to 5 cm. of water). If adhesions are very dense this injection may be painful. The more these adhesions can be stretched, the more successful will the treatment be, and if some of the firm ones are broken down the lung collapse will be more complete, and in consequence the lung rest gained will lead to a more certain healing of the ulcerating and inflamed lung tissue. This after-filling must be repeated at varying intervals for at least two years.

The indications for refilling are pain or discomfort in the chest, slight fever, and return of the cough. In a certain proportion of the cases (about 30 per cent.) an effusion forms in the pleura during the three or four months succeeding the commencement of this treatment. Patients who suffer from this complication often complain of much pain when the fluid is forming, but do not seem to progress less favorably; the fluid eventually clears up under a dry diet, and it is probably never necessary to aspirate the effusion.

It is most important to examine the chest with the x-rays before and after each filling, observing the size of the pneumothorax and the shape of the lung as determined largely by pressure in the pleural and pull of pleural adhesions.

Surgery of Abdominal Injuries.– Riedel (Deut. med. Wochensch.) gives us the following conclusions: 1. The most reliable sign of an injury of one of the abdominal organs is rigidity of the abdominal wall. 2. This is produced by the escape of gastric or intestinal contents or blood into the peritoneal cavity. 3. The more rapid and abundant this influx the more rapid the occurrence of rigidity. 4. Exceptionally it may be produced by trauma of the abdominal wall at circumscribed places or by simple contracture of the intestine. 5. Occasionally intestinal injuries are not followed by this symptom. 6. Rigidity of the abdominal wall when associated with a rapid, small pulse, a pallid, drawn face, and vomiting is indicative of profuse hemorrhage from the liver, spleen, pancreas, mesenteric arteries, etc. Under these circumstances the patient should be operated upon if possible within a few hours after the injury, in order to arrest the bleeding. 7. Rupture of the stomach rapidly leads to rigidity; rupture of the intestine more slowly, while a wound of the intestine may become sealed for the time by contraction. Such closure, however, is not to be depended upon even in small wounds. The comparatively late occurrence of peritonitis after intestinal rupture in some cases may possibly be due to the fact that intestinal microorganisms require up to six hours to thrive in the peritoneal cavity. 8. Patients with ruptures of the gastro-intestinal tract should be operated upon if possible within the first six hours and at the latest within twelve hours after the injury, though occasionally recovery follows after a longer period. 9. The injured should be transported at once to a hospital equipped for the performance of major operations and not to their homes or to small hospitals. 10. Separation of the mesentery from the intestine, tears of the serous and muscular coats, or undermining of the mucosa may lead after a time to gangrene of the gut and the formation of fecal abscess or kinks or strictures. 11. In the vicinity of an intestinal segment deprived of its nutrition, the omentum and healthy intestinal coils become adherent to one another, the endothelium undergoes changes, the stomata disappear, and the absorptive power of the peritoneum ceases. This also occurs if the intestine is only severely contused but not gangrenous, the hemorrhagic effusion becoming purulent, but not leading to the formation of fecal abscess. 12. Hemorrhage from the lacerated liver is best arrested by suturing the omentum into the wound. The spleen, if injured, should be totally extirpated, even though occasionally disturbances have been observed after this radical procedure. 13. Renal ruptures are to be always treated conservatively, but in case the patient is rapidly succumbing to hemorrhage, extirpation of the affected kidney, which is often lacerated in several places, should not be postponed. 14. Contusions of the abdomen of moderate degree which do not lead to lesions of the intra-abdominal organs are sometimes rapidly followed by tympanites. 15. Slight injuries of the abdomen may produce severe symptoms (vomiting, rapid, small pulse, drawn face), which are comprised under the name of shock; on the other hand, extensive injuries of the abdominal viscera, especially the intestine, may cause at first very insignificant disturbances; the former, however, diminish and the latter increase in intensity. If we wait to make a correct diagnosis we may miss the proper time of treatment. 16. Slight contusions of the abdomen in rare instances lead to permanent damage to health by the formation of adhesions, kinking of the intestine, etc. Complaints on the part of injured persons extending over a long time are usually unfounded if the patient does not remain thin and sickly. 17. Subcutaneous ruptures of healthy abdominal muscles are quite rare. 18. Infected wounds penetrating down to the peritoneum are comparatively frequent; their treatment is usually very difficult, because pus is apt to spread between the different muscular layers and may lead to peritoneal infection. The latter can only be prevented by widely opening up and exposing the pus focus.

Partial Thyroidectomy.—Dunhill, in The London Lancet, is in favor of operating under local anesthesia, because patients are safe, distress is negligible, the recurrent laryngeal nerve may be guarded, and post-operative vomiting does not occur. The Dr. uses 7 oz. of 2 to 1,000 novocain, well infiltrating all the front of the neck. In regard to the question as to how much gland tissue has to be removed he says: "We have to remove enough to cure the disease, and we must leave enough for physiological purposes, and all the judgment and experience which one has are called for. In young patients, and those not very bad, the larger lobe should be enough, with any mid-lobe or isthmus. In older people, and those in whom the disease is very bad, the removal of one lobe will practically not do any good at all; one lobe and half the other must be removed. If the gland has been big and active, even then the remaining portion may be too large. One has to remember that more can always be removed, but it cannot be put back again easily. One must remove enough, but one must never be hustled into removing too much in order to make a "complete job" at once. Although I now rarely have to operate more than once, it will occasionally happen that more has to be removed in order to completely cure the patient, and in three cases I have operated three times."

Lacerations of the Tentorium During Labor.—Pott (Zettschrift fur Geburtshulfe und Gynakologie) mentions the frequency of intracranial hemorrhage in the new-born from lacerations of the tentorium and the consequences of this process in later life. The Dr.'s study is based on a series of thirty-three cases, as the result of which he presents the following conclusions. It was found that in autopsies on children up to six months of age, that traces of dural hemorrhage were present in an equal number to those found soon after birth, so that the percentage of such hemorrhages following lacerations is a considerable one. Lacerations of the tentorium manifest themselves in three different forms. The most common variety consists of a transverse tear of the free edge which usually involves the middle portion and in many cases both layers are torn. The hemorrhage in such cases dates from the numerous small veins which are present on the edge of the tentorium and the blood finds its way forward into the temporal fossa or upward over the occipital region. In a few cases it penetrates beneath the tentorium, surrounds the cerebellum and finds its way down along the medulla and the spinal canal. Less marked injuries involve the upper portion of the tentorium and the falx cerebri between the two leaves. In about sixty per cent. of the author's cases the labor was very difficult, the majority being operative deliveries. In contrast to this the remaining deliveries were normal and in some cases very rapid. In seven cases such lacerations were noted in premature infants and one in a four months' fetus. It is quite evident therefore, that in every labor the possibility of this accident is present and is only slightly increased in severe labors. Pott believes that the stretching of the falx cerebri in the long axis of the skull predisposes to hemorrhage from a laceration of the tentorium, which may be brought about by lateral prsssure on the temporal regions. It is probable that if this stretching takes place gradually the escape of blood occurs very slowly and produces comparatively little pressure. Therefore in many cases no evident symptoms whatever may result, but if for some reason or other, a congestion is present, then the hemorrhage is increased in amount depending on the size of the torn veins or the degree of the congestion. If extensive bleeding has occurred at the time that labor is completed, the resulting asphyxia produced by pressure on the medulla simply increases the amount of hemorrhage owing to the congestion present. Where death does not result in these cases, the laceration of the tentorium may heal spontaneously so that in two or three weeks after birth, scarcely a trace of the injury remains. The writer also refers to the possibility of an injury to the tentorium occurring after labor by a forcible compression of the child's head from extraneous causes.

Vaccine Therapy of Tuberculous Joint Disease in Children.—Harris (Proc. Roy. Soc. Med.) states that the infection is often of bovine origin, and occurs through the alimentary canal, the infecting food being usually milk. Among the working class, environment, as well as food, is an all-important factor. The occurrence of auto-inoculations, as evidenced by the fluctuations of the opsonic index, is a valuable guide not only to diagnosis but also to the determination of whether or no a cure has been effected. Apart from this it is not necessary to employ the opsonic index during the whole course of treatment, provided that the case, clinically, is pursuing a favorable course. Tuberculin, given in small doses, under conditions of surgical rest, is a remedy which tends to accelerate the rate of recovery. Children have a naturally recuperative power, which apparently is called out by the use of a bacterial vaccine in certain cases which do not automatically respond to surgical rest, and improved environment.

Indications for Surgical Interference in Tuberculous Joint Disease in Children.—Tubby, in The London Lancet, states that the objects of every form of treatment of tuberculous arthritis must be: (1) To eradicate the disease; (2) to preserve the functions of the part; and the question is whether these results are more frequently obtained by climatic and conservative measures or by so-called radical operations. The balance of experience gained in treatment during the last decade shows that unquestionably conservative treatment is the better in childhood. Time is saved, the resultant deformity is diminished, and there is less risk of generalized tuberculosis when the treatment is non-operative. As regards the treatment of tuberculous abscesses, if the pus is deeply placed, and if the patient is placed at rest in good air, the fluid contents are sometimes absorbed, and the caseous matter becomes encapsuled. If, however, in spite of these measures the abscess increases in size its sac should neither be allowed to become adherent to the skin nor to open spontaneously, as an opening often forms in an undesirable position and is liable to septic infection. When pus continually re-forms it is generally due to the extension of bone disease or to loose sequestra, which can be ascertained by means of Roentgen rays. Then the abscess is opened invariably by more than one incision, so as to permit free access to the cavity and allow the pockets to empty. The fluid contents and the sequestra are removed without any violent scraping of the sac wall, which should be merely rubbed with a soft swab. Pure carbolic is then applied and left in for about a minute and washed out with absolute alcohol. The cavity is then dried and closed immediately so as to obtain primary union. If a little fluid accumulates subsequently beneath one of the wounds, a sterilized probe is inserted, the fluid pressed out and the wound allowed to heal. It is doubtful whether operative results are better in cases of tuberculosis of the hip-joint than those obtained by rest and splints. The safest course in tuberculosis of the knee-joint is to give a long and patient trial to conservative treatment, and, if this fails, to give up all hopes of a movable joint and do a formal excision, having regard to the epiphyseal lines, and endeavor to secure sound bony ankylosis and a straight limb. Even in dealing with the ankle and foot, statistics show the best results to be obtained by rest and conservative treatment. The joints of the upper extremity present problems differing from those of the lower. Whereas the chief functions of the lower limbs are stability and weight-carrying, those of the upper extremity consist of highly educated movements and the importance of preserving them is undisputed. Operative interference, if it is likely to have the desired object, may therefore be considered at an earlier date than in the lower extremity. In children, however, erasion frequently proves to be better than a formal excision when conservative treatment has failed. Tuberculous arthritis of the shoulder is frequently followed by pulmonary tuberculosis, so eradication of the disease in this joint may be attempted at an earlier stage than elsewhere.

Malignant Disease of the Testicles.—Davies, in The London Lancet, presents the following summary: 1. All tumors of the testicle must be regarded as malignant. 2. The history of previous venereal disease, the association of the swelling of the testicle with an injury, the length of the history dating perhaps from childhood, must not be allowed to outweigh clinical evidence. 3. Always suspect a tumor of the testicle when there is an oval swelling which is not translucent and comparatively painless. 4. When the tumor is in addition soft or elastic, and the surface shows slight lobulations, regard the suspicions as confirmed. 5. Increased pulsation of the cord is in favor of tumor, but is not pathognomonic. 6. A solid tumor may be so elastic as to give the feel of a fluid swelling. 7. The aberrant clinical manifestations of a testicular neoplasm must be constantly borne in mind. 8. If the diagnosis is uncertain and the possibility of a growth is entertained the tumor must be explored. Should the tumor be syphilitic, no harm will have been been done; if tubercular or a hematoma, operation is the correct treatment. 9. When the diagnosis of tumor is confirmed the complete radical operation, consisting of removal of testicle, cord, lymphatics, and surrounding fascia, and of the lymphatic glands in the region of the aorta and vena cava, must be done, unless the lumbar glands are extensively involved, or there are evidences of metastases elsewhere

Syphilitic Uterine Hemorrhage.—Jaworskl (Wein. klin. Woch.) mentions eight cases of obstinate uterine hemorrhage of syphilitic origin. There is a syphilitic angio-sclerosis of the uterus marked by a hardening of the uterus which may spread to the whole organ and even to the parametric tissues. As a rule, the blood vessels are affected, and the syphilitic arteritis of tertiary syphilis may be the most prominent, and indeed may be the only, uterine change. The loss of elasticity of the uterine tissue together with the hardening of the uterine vessels, may give rise to frequent copious and obstinate bleeding from the uterus, both at the menstrual period and in any hyperemia of the uterus. He gives notes of five of his cases. In the first of these the hemorrhages had been excessive during three years, and three "cures" with saline baths and peat baths had done no good, nor had curetting the uterus. At this time the man with whom the patient, an unmarried woman cohabited, came under treatment for tabes. Antisyphilitic treatment was now given to the woman, with the result that the abnormal hemorrhages altogether ceased, and the uterus became smaller and also became normal in consistency. The symptoms which suggest tertiary syphilis of the uterus are very little characteristic. The most constant symptom is the occurrence of uterine hemorrhages which resist local treatment and the next in frequency is an obstinate offensive muco-purulent discharge. The loss of blood always results in severe anemia, which may even go on to a kind of cachexia. The uterus is usually increased in bulk, occasionally is atrophic, its tissue is lacking in normal elasticity, and may be hard, sometimes almost of cartilaginous hardness. A history of habitual abortion, usually at the same period of pregnancy, would be a great help to diagnosis. In the ulcerated forms of late syphilis of the uterus, carcinoma of the uterus may be wrongly diagnosed. Diffuse or circumscribed gummata of the uterus may be mistaken for myomata of the uterus.

Syphilitic Strumitis.—Schuster (Wien. klin. Rundschau) mentions two cases of strumitis on a syphilitic basis. The first was a man of sixty-six years of age, the second a woman of twenty-seven years of age In both cases syphilis was denied. The first patient from childhood had suffered from a slight enlargement of the thyroid, especially on the right side, but there had been very few remaining symptoms. Five weeks before his admission to the clinic the tumor had become painful, and respiratory symptoms had been more frequently felt. He had also begun to suffer from headache on the right side of the head, and the general condition had become greatly affected; he was pale, and lost weight rapidly. On examination, on admission, the right lobe of the thyroid was occupied by a somewhat considerable fixed tumor, firm in consistency except at the upper end. The skin over the tumor was but little changed. The temperature varied between 37.6° C. (99.7° F.) and 38.5° C. (101.3° F.) The diagnosis was of malignant tumor. After a few days the condition changed in that fluctuation became evident at the lower pole, and the skin in this part became somewhat red and edematous. A large quantity of thick pus mixed with pieces of necrotic gland tissue was evacuated. At first the patient's condition improved, and the wound seemed to be taking a normal course, but later it began to discharge freely, and after three months had not healed up. At this stage the formation of an ulcer on the leg led to the taking of Wassermann's reaction with a positive result, and the diagnosis of syphilitic strumitis now made was confirmed by the result of antisyphilitic treatment. In the second case the purulent focus had developed in a tumor of long standing. Active symptoms were pain in the neck and ear, and pain on swallowing. When seen there was a diffuse swelling reaching from one sternomastoid to the other, the skin over it was red, and fluctuation could be detected. The voice was hoarse. Pus was evacuated, and the operation wound during the course of healing took on the appearance of a specific ulcer. Potassium iodide caused healing in a short time. In the meanwhile mucous plaques had appeared in the mouth and Wassermann's reaction had proved to be positive. In neither of these cases was there anything at first to suggest syphilis. In the second case syphilis appeared to be the primary affection and the acute thyroid condition to be of the nature of a secondary metastatic infection, since no other primary infection seemed probable.

Labor After Anterior Hysterorrhapy.—Schauta (Monatsschrift fur Geburtshulfe and Gynakologie,) gives his views on the question of radical interference in cases of labor occurring after fixation and suspension operations on the uterus and from a consideration of all the factors concerned, believes that we should be less ready to interfere in a radical manner than has hitherto been the custom. The Dr. thoroughly studied the literature of the subject and claims that in a great many cases anterior traction on the cervix will result in bringing the os into the axis of the birth canal and favor delivery by natural means. In cases where this is not successful, a sagittal incision of the anterior lip of the cervix is sufficient. This procedure is particularly indicated in vaginal fixation, as the bladder is sufficiently high in these cases to be above the pelvic brim. In a ventral fixation the bladder occupies a much lower position and must therefore the incision in the cervix is made. In a large proportion of these cases, the fetus lies in a transverse position, because the development of the uterus in its long axis is prevented, but there is nothing to stop its growth in a lateral direction. A versi n therefore is indicated followed by a breech extraction. Schauta belives that the elastic bag affords a favorable means for dilating the cervix in ventral suspension cases and aids in bringing the oz into the line of the birth canal. Craniotomy is only indicated werer the fetus is dead and the pelvis deformed. Referring to the large number of cases in which abdominal Cesarean section has been done, Schauta considers that in most instances this has been unnecessary and that a restriction should be made in the application of this operation. The writer claims that insufficient attention has been given to the less radical methods of delivery and that if these had been attempted the abdominal section would have been found unnecessary. The Dr. says that it is only indicated in exceptional cases, where pelvic deformity is present as added factor. Schauta belives that the prophylaxis in a labor following fixation operations is most important and also that the best results are obtained as regards the course of future labors by the so-called indirect methods, in which shortening of the round ligaments is employed, rather than by the production of a new brand between the uterus and abdominal wall or an area of close adhesion.

The|Pathology ol Menstrual Bleeding, - Klein (Monatsschrift fur Geburtshulf and Gynakologie) presents a study of the observations and investigations which have been made in this subject from a biochemical standpoint as this is related to the histological and bacteriological findings. It appears that histological research will onlo serve to explain many of the phenomenon of menstruation if it is supported by biochemical observations. Thus. it seems to have been shown that under the influence of the so-called oophorins, including folliculin, ovulin and lutein, the mucous membrane of the body of the uterus is able to convert the maternal blood in a certain way into nutrient blood or trophemia. If the ovum which is freed about this time fails to be fertilized, the resulting nutrient blood is simply extruded as menstrual blood. Both the nutrient and the menstrual blood are not coagulable. He says that membranous dysmenorrhea may be explained by a self-digestion of the spongy layer of the uterine mucosa. The pains which accompany this condition arise from insufficient formation of oophorins, as the result of which the uterine mucosa instead of noncoagulable blood, throws out blood which coagulates wholly or in part and these coagula are expelled by the resulting painful contractions of the uterus. Oligomenorrhea results from an insufficient production of oophorins as the result of which there is an insufficient swelling of the uterine mucosa and insufficient excretion of nutrient blood. This restlts in the well-known symptom-complex of early adiposity, scanty menstruation and either sterility or few childred. On the other hand, menorrhagic disturbances may be regarded as due to physiologically increased excretion of menstrual blood following profuse formation of oophorins. The conditions known as fibrosis uteri and fatty degeneration of the uterine musculature are explained as physiological phenomenon of the semile or pre-senile states, and are circulatory in character.

Cripple Insurance.—Rokotnitz proposes a system of insurance which would diminish the economic loss caused by the existence in society of crippled persons. His scheme provides for the payment for most advanced medical and surgical procedures which offer hope of diminishing the disability caused by the crippling lesion. In case this is impossible he proposes an insurance which would make up for diminution of earning power in case of the birth of a cripple in a family. He thinks that such insurance can be well combined with the usual life and accident insurance.—Zeitschrift fur die gesammte Versicherungs-Wissenschaft.

Albuminuria and Acid Urine.—Hoesslin (Deutsch. Archiv fuer klin. Med.) shows that in certain cases of nephritis the albuminuria is dependent upon the degree of acidity of the urine, so that, when the latter is made alkaline, the albuminuria diminishes or disappears. An increase in the acidity of the urine, on the other hand, increases the percentage of albumin in the urine. As the albuminuria diminishes, with the lessening of urinary acidity, the formation of casts also becomes scantier. This relationship by no means holds good for all cases of nephritis, and as yet we have no means of ascertaining in what cases there is a relationship between urinary acidity and albuminuria. He therefore considers it imperative to determine the urinary acidity in every case of nephritis and, if it is high, to administer sodium bicarbonate in daily doses of 2 to 8 grm. until the urine is alkaline. If the albuminuria reacts favorably to this medication, the latter should be continued for long periods of time.

Jejunal and Gastrojejunal Ulcers.—Robson (British Medical Journal). These ulcers, says the Doctor, develop not infrequently and sometimes unavoidably after gastro-enterestomy, never spontaneously. Usually they are due to the fact that sufficient care is not exercised in dieting patients, who have undergone the operation of gastro-enterostomy, so that hyperchlorhydria and sepsis combine to produce ulceration. The dangers of jejunal ulcer arise, not only from painful indigestion (the pain simulating that of duodenal ulcer, only varying in position), but also from a recurrence of symptoms of ulcer, often associated with hemorrhage and not infrequently ending in perforation. If, after a period of good health subsequent to the operation of gastro enterostomy, a patient begins to complain of acidity, flatulence, and discomfort after meals, followed after a time by definite pain from an hour or two to three hours after food, and relieved temporarily by taking milk or some other light diet, or some form of alkali such as sodium carbonate; if the pain occurs on the left of the umbilicus and is associated with marked tenderness and rigidity of the left rectus, the suspicion of ulcer of the jejunum will arise. The complication of hematemesis or melena, or even the presence of occult blood in the feces, will make the diagnosis fairly certain; but if, with all these symptoms, a swollen and tender loop of bowel can be felt in the region of the anastomosis, or below and to the left of the umbilicus, the surgeon can no longer be in doubt as to the nature of the disease. The Dr. has devised a means of treating the condition which seems to give excellent results. Is the old ulcer, for which the primary operation was performed, has healed he detaches the jejunum from the stomach, excises the existing ulcer, and closes both stomach and jejunum. If this is impossible, or if the food cannot resume its old channel, he excises the gastrojejunal or jejunal ulcer, and, after making a new gastro enterostomy, he attaches the jejunum to the anterior abdominal wall and introduces, through a jejunostomy opening, a small catheter through which the patient can be fed for an indefinite time. This puts the stomach at rest and allows restoration to normal and uninterrupted healing of the stomach and jejunum. The operation is also applicable in the following conditions: (1) Extensive cancer of the stomach; (2) general cicatricial contraction of the stomach; (3) chronic and even acute gastric ulcer; (4) chronic duodenal ulcer; (5) in jejunal and gastrojejunal ulcer when the patient is too ill for the more extensive procedure; (6) in persistent vomiting which threatens life.

Early X-Ray Diagnosis of Cancer of the Large Bowel.—Haenisch (Muench. med. Wochenschr.) says that an enema, consisting of 75 grm. bismuth, 300 grm. bolus and 1 litre of water, forms a fairly permanent suspension that in normal cases can easily be made to traverse the entire extent of the large gut. A fluoroscopic examination after such an enema shows the size, shape and position of the lumen of the bowel very accurately. Both inflow and outflow of the enema should be watched by means of the screen. The position of palpable tumors can thus be accurately localized, and stenoses, palpable or otherwise, can be clearly made out. The latter reveal themselves as constricted areas in the bismuth shadow with a permanent greater dilatation of the proximal as compared with the distal portion of the gut. In marked stenosis, the bismuth suspension may fail to pass beyond the stenosis. It must be remembered, however, that colonic spasm or kinking may give pictures identical with those produced by an organic stricture. Prolonged observation, however, usually enables one to distinguish between the conditions, the spasm or the kink eventually permitting the bismuth suspension to flow by, whereas a malignant stenosis offers a permanent barrier. An advantage of the bolus suspension is that it allows the outflow of the enema through the rectal tube at the close of the observation, thus obviating the disagreeable deposit of large masses of bismuth in colon and cecum.

Prognosis of Tuberculosis in Infants.—Hahn (Monatschrift fur Kinderheilkunde) says that with the advance in our knowledge of tuberculosis, important differences have been found between the tuberculosis of children and that of adults. This has been made possible by the newer methods of tuberculin diagnosis and by animal experimentation. The text books, however, claim that tuberculosis in infancy has practically a fatal prognosis.

The Dr. bases his paper on 69 cases of tuberculosis which have come under his observation, in young infants. Of these, 48 died, or a mortality of 69 per cent. Of 20 under six months, 15 died. Of 26 from 6 to 12 months, 19 died, making a mortality of 77 per cent. in the first year. Of 23 cases, from 12 to 20 months, 14, or 60 per cent., died. The author found no appreciable differences in the mortality of those nourished on breast milk from those artificially fed. An inherited disposition did not seem to exert much influence but the post partum infection was a most important factor. This was shown through the bad surroundings and the presence of one or more tuberculous individuals in the household.

The prognosis depends on the age of the child and is worse but by no means hopeless in the first year of life. It also depends on the clinical course and the localization of the infection. Children who have no temperature and whose body weight increases and in whom the tuberculosis is limited to the lymph glands generally recover. This also applies in the cases in which the disease is confined to the eyes, bones, and joints.

The wide spread tuberculosis, involving the lungs and the internal organs, is generally fatal. The prognosis among illegitimate children is a great deal worse than among legitimate, as they do not seem to be able to resist the infection.

The Relation of Nasal Obstruction to Articulatory Capacity.—Jones (British Journal of Children's Diseases) gives by numerous tabulations the results of his examination of the articulatory capacity of 700 children with reference to general dyslalic troubles arising from nasal obstruction in comparison with those who had no anatomical defects. The 700 school children were divided by their teachers into two groups, one comprising those whose speech was thought to be "normal" and the other group the "defectives." Each child was tested with 227 different consonantal sounds.

His conclusions are:

(1) In average school children (469 cases, 106,500 tests) the articulatory capacity for consonants is found to vary with the degree of nasal obstruction. The dependence of the capacity on this factor is not very close, but is much more decided with boys than with girls. The incidence of nasal obstruction being equal in the two sexes, it would seem that a given degree of it produces, through partial deafness or in some other way, a more harmful effect on the articulatory capacity of boys than on that of girls. This is in harmony with the author's hypothesis, previously put forward, that hearing is more essential in the acquirement of speech with boys than in girls, the latter making use of a second channel of education, lip-reading, which is shut to boys.

(2) In children with gross articulatory defect of dyslalia (231 cases, 52,000 tests) no correlation whatever was found between the extent of this defect and the degree of nasal obstruction present. Investigation of a larger series might reveal a slight correlation, but nasal obstruction is evidently not an important cause of dyslalia in general, and any action it may have is readily obscured by that of more important factors.

Observations upon Nervous Manifestations in the Rheumatism of Children.—Poynton (British Journal of Children's Diseases) believes that the nervous symptoms in rheumatism are the result of either a local infection in the nervous centers, or of a general toxemia, the former being the more important. It is suggested that a bacterial poison may vary according to the anatomical structure which the organism inhabits and that perhaps we are dealing with the same organism exhibiting different metabolic processes under different conditions. Such thoughts are strongly suggestive in view of the fact that the pleura and pericardium are so frequently affected and the peritoneum and pia so rarely. The micrococcus soon loses virulence on agar agar and retains it much longer on fresh blood agar. The tubercle bacilli and other organisms show similar peculiarities. The very common phenomenon, chorea, and the rare one, hyperpyrexia, in their relation to rheumatism have been studied with some completeness. Statistics covering a period of eleven years form the basis of this paper. Chorea usually develops before puberty and is infrequent after that period. It is to be inferred that the brain at that time develops a greater resistence to the poison. Females are much more susceptible than males, due, perhaps, to some mysterious peculiarity of female metabolism.

The onset may be abrupt or very gradual. The insidious cases show early signs of rheumatic cerebral disease and may only after weeks show the obvious chorea. The warning symptoms are nervousness, headache, excited imaginations, night-terrors, irritability and fidgetiness. A sudden shock may precipitate the chorea. This brings to notice a great gap in our present knowledge of the relative parts taken by the infective agent and by the toxins. Clinical study seems to justify the presumption that they vary in different cases.

Cholera and epilepsy are associated and not interdependent cerebral lesions. Mental defects seem, however, to follow the onset of chorea or to be associated with it. After the attack there often remain definite nervous conditions of the child, such as extreme nervousness and irritability, stammering or entire inability to speak for a time.

Pathologically, as elsewhere with rheumatic lesions we get two classes of change, the vascular and inflammatory type, and minute areas of softening.

In an analysis of 500 cases the author has included 225 which came to him with chorea as one or the only symptom, thus assuming them rheumatic. Of the 225, heart lesions and in many cases other rheumatic symptoms were obvious in 122; 28 more were suffering from rheumatic arthritis and pains. In 22 other cases there was dilatation of the heart with no other signs of the rheumatic state. Among the 67 cases not rheumatic, 15 gave a history of fright, and seven suffered later from rheumatic heart disease.

In 10 cases chorea directly followed a sore throat; in 19 there was a history of rheumatic fever in the family.

In considering the treatment the author impresses the fact that chorea is most uncertain as to duration and response to drug treatment. Six weeks is a short time in which to effect a cure. In general, the aim should be to destroy the infection and build up the nervous system. For early and mild cases salicylate of soda combined with bromids in moderate doses; physical and mental rest with special variations in some cases; warm packs at night are very often soothing. For the worst cases the author prefers chloral and bromide, or trional. Chloretone and antipyrin are also suggested. If one fails, it is well to try another. It has been found that some cases have been relieved by lumbar puncture. The diplococcus has been recovered from the fluid. Arsenic is suggested for cases with normal temperature.

Postoperative Treatment of Cancer.—Johnson (The London Practitioner) says that the therapeutic agencies which have a recognized place in the prevention and treatment of recurrences are: 1. X-rays; 2, radium; and, 3, thyroid and thymus extracts.

With regard to the first measure, it has been proposed at a recent meeting of the British Medical Association to scatter sterilized precipitated silver over the raw surface at operation, before stitching. The effect of subsequent x-ray treatment is then the production of a secondary radium-like radiation in the place where it is most needed. The author has shown, too, that it is possible, by utilizing the secondary rays from precipitated silver taken by the mouth, to produce a physiologically active radiation in the stomach, duodenum, or large bowel—a fact which will probably render the x-rays available in malignant growths involving these deep organs. In any event, preventive x-ray treatment should be begun as soon after the operation as the patient is able to attend for it. There should be at least one sitting a week for many months, and subsequent courses should be given at intervals for the rest of the patient's life. In cases where x-ray treatment is refused by the patient until recurrence is manifest, the pain attending the latter can often be relieved, even at this late period of the disease. A dozen sittings, extending over a period of a month or six weeks, may result in complete cessation; and frequently the pain does not return, even though the disease ultimately kills the patient. Moreover, recurrent growths can often be held in check by the x rays and the skin preserved intact. Occasionally diminution or actual disappearance of the external tumor may occur.

Certain cases which the Rontgen rays have failed to benefit yield to radium. With the latter, the diseased tissues are subjected to an actual mechanical bombardment by the beta "rays" (in reality minute particles), which cannot be obtained from an x ray bulb. Again, a permanent source of radioactivity may be created in the interior of a tumor by injection of an insoluble radium salt; or, the radium ion may be introduced by cataphoresis. The author has found that the ill health and depression often accompanying recurrent cancer are greatly benefited by the internal administration of radium water.

Thyroid extract has been used, especially in mammary and laryngeal cancers. Woods recently reported the case of an almost moribund patient who recovered his health under thyroid treatment, while Jones tells of a "return tumor" in the axilla of an elderly woman which entirely disappeared in three months, the patient thereafter remaining quite well until the time of writing, a period of nearly ten years. Many other equally striking cases are to be found in the medical literature of the past decade.

Extraanal Treatment of Hemorrholds.—Boas (Munchener medizinische Wochenschrift) says that he has found it unnecessary always to replace prolapsed piles into the rectum. He has treated thirty cases by applying Bier cups about the size of a silver dollar over the prolapsed tumors, with successful results. The cups, according to his procedure, are allowed to remain one half to one hour, thus inducing a circumanal edema which, if it is sufficiently pronounced and persistent, leads to a cure of the condition in a few days. Where the result is to be successful, the nodules assume a blackish hue and become thrombosed in twenty-four hours, and a few days later are reduced to hard, shriveled masses. Any hemorrhage attending the application of the cups is easily checked by enemas of a five per cent. calcium chloride solution. A certain amount of pain is experienced by the patient during and after the cupping, but the use of analgetic drugs rarely becomes necessary. Already on the second or third day the discomfort is gone and defecation painless. The patient should remain in bed four or five days, lying on the side as much of the time as possible, and laxatives should be given if there is a tendency to constipation. Where the hemorrhoids have a broad base, the edema produced by the cupping is but temporary and the treatment ineffective. Some indication as to whether the result is to be a successful one or not, may be obtained when the cup is removed at the end of an hour; if the hemorrhoids return spontaneously to the rectum at this time the treatment will not prove efficacious. Where success is obtained by the method, however, subsequent recurrences are rare.

Treatment of Plantar Hyperidrosis.—Therault (Gazette medicale belge) says that he has had frequent occasion in the military service to observe the good results obtainable in this affection by means of the commercial formaldehyde solution, diluted one to one. Where it is necessary to administer treatment about every two weeks he advises that the solution be applied even undiluted, by means of a brush. After allowing it to remain in contact for three minutes, it is washed off by dipping the foot in water. No pain should be caused by its application; if pain does occur the solution should at once be washed off. In twenty-four hours the plantar skin, previously swollen and red, becomes dry. If the solution is reapplied in a few days, further drying takes place and the superficial layer hardens so that walking becomes easy and painless; but in many instances one application suffices. The excessive secretory activity is checked, odor disappears, and the integument assumes a somewhat brownish color.

On the Occurrence of Carcinoma in Cystic Teratomata of the Ovary.—Williamson and Barris (The Journal of Obstetrics and Gynecology of the British Empire) state it is well known that the majority of cystic ovarian teratomata are benign in the sense that they neither invade adjacent organs or give rise to metastases. On the other hand the majority of solid ovarian teratomata are malignant. One must not confuse "epithelial infection" with malignancy. The phenomenon of epithelial infection is occasionally found associated with many varieties of ovarian cysts. If the cyst ruptures detached portions of the epithelium lining the cyst may become implanted upon the surface of the peritoneum and give rise to secondary growths which are not malignant but persist as surface growths. These secondary tumors are often transient, and if the parent cyst—the seed supply—be removed, usually disappear.

The recorded cases in which carcinomata and dermoid cysts were found in the same ovary may be divided into three classes:

1. Where the dermoid has been invaded by carcinoma arising in an adjacent organ.
2. Two distinct tumors in the same ovary, one a dermoid and the other a carcinoma.
3. When carcinoma has arisen in the epithelial structures of the dermoid cyst itself.

The writers quote from the literature an example of each of the first two groups, and consider in detail the third group.

They found in the literature thirty-two cases reported where squamuscelled carcinoma had developed in an ovarian dermoid. They have accepted only sixteen of these as being authentic. An abstract of the sixteen accepted cases is given, and they report in detail four cases of their own.

They conclude that ovarian dermoids, which in the vast majority of cases are benign, may occasionally be the site of origin of a malignant growth.

A Contribution to the Origin of Uterine Muscle in Relation to Blood Vessels.—Clarke (The Journal of Obstetrics and Gynecology of the British Empire) says that during fœtal life the uterus has a trabecular arrangement, the arteries appear to grow into the trabeculae from the broad ligament, the venous spaces seem to arise in situ.

As early as the third month small spaces are found in the uterus, a few of which appear to contain blood corpuscles. A little later fine arteries are found, having the appearance of growing into the uterine substance from the broad ligament. By five months there are indications of these arteries invading the spaces (venous) described above. By the completion of intra-uterine life the arterial ingrowth has proceeded as far as the endometrium. The venous spaces of the myometrium are invaginated by these arteries,—this process he calls "Condensation.', The muscular tissue of the uterus has also greatly increased and has arisen, in part from the muscular tissue of the arteries invading its walls.

During infancy the arterial invasion continues, and the process of "Condensation" is completed by the end of six or seven years. The muscular tissue has also increased. The cavernous tissue of the myometrium is similar to that which exists in erectile tissue, i.e., corpora cavernosa, fœtal heart of man and adult heart of some amphibians.

The venous spaces in the cavernous tissue of the human uterus are not obliterated later in life, but remain as potential rather than actual spaces, and are concerned in the erection of the uterus and in the formation of maternal blood sinuses during pregnancy.

The development of uterine muscle during fœtal and infant life takes place in definite relation to vascular structures. In other words, it is in the development of muscular tissue in the trabeculae of the mesh-work of the cavernous structures and the muscular growth in the walls of the arteries that growth of the uterine wall takes place. Injected specimens show that the arteries communicate with the venous spaces, and also serve to indicate the great vascularity of the uterus.

Alcohol Injections in Neuralgia.—Pussep (Archiv f. Psychiatrie) discusses the important therapeutic measure of alcohol injection in neuralgia of various forms with particular reference to the treatment of trigeminal neuralgia by this means. A widening experience demonstrates that alcohol injections are of very distinct value, even in the worst cases. A discussion on the method of injection is given and the statistical results obtained in thirty-six cases are of value as an indication of the means and results of this method of treatment. The study of upward of six hundred cases appearing in the literature together with those of the author seem to demonstrate a large percentage of cures and the relative harmlessness of the procedure. It is possible after repeated injections in the nerve to bring about a complete degeneration of its fibers. This method may also be used in intercostal and root neuralgia with distinct advantages, and also without danger.

Tic Salaam.—Ascenzi (Revue Neurologique) reports a case in an infant two and a half years of age. At the age of nineteen months, when dentition was well advanced, the infant began showing the attacks of inclination of the head, with fixation of the eyes. These attacks were repeated from two to ten times a day in about two minutes. Accompanying these attacks there was general rigidity of the body and a mental distraction. Neurological examination of the infant was negative. The attacks ceased under bromide treatment. He says that this case was epileptic in nature. The Dr. mentions the possibility of spasms of inclinations of the head being due to infectious diseases, dentition, rickets, brain tumor and reflexes from labyrinthine d s ease.

Suprarenal and Mental Disorder. Gallais (Revue Neurologique) mentions a case. The patient who was forty-nine years of age, had a tuberculous hip at about the age of nineteen and shortly afterwards it was noticed that he had some pigmentation of the skin. During his life he had twelve attacks of mental trouble characterized by the sudden appearance of extreme lassitude and asthenia accompanied in some cases by maniacal excitation, in other cases by hallucinations, insomnia and trembling, and in still others with melancholia. On examination it was noted that he had a marked pigmentation of the skin, that the right pupil was punctiform, the myosis being probably due to the presence of a pigmented tumor of the iris. The case is particularly interesting because it combines in one person the various syndromes which have been described as due to the disease of the suprarenal; the encephalopathy, described by Klippel; the neurasthenic form, described by du Four and de Fursac, the melancholic form, by Laignel-Lavastine, and the ordinary form of Addison's disease showing the hyperpigmentation.

Diagnosis of Tumor of the Fourth Ventricle.—Anton (Archiv f. Psychiatrie) gives complete histories of five patients with tumor of the fourth ventricle, and reaches the following conclusions from his study. A puncture through the corpus callosum or a puncture of the ventricle relieves the pressure in the posterior fossa as well as the pressure in the fourth ventricle. A relief of pressure in the third ventricle may likewise be secured by means of a callosal puncture. It is even possible for an experienced surgeon to lay bare the region of the fourth ventricle and to penetrate into the fourth ventricle through the foramen of Magendi or from the upper worm of the cerebellum. Even should the tumor or cyst lie in the cerebellum, an exposure is no longer impossible. A frequent origin of tumors is the dorsal plexus of the fourth ventricle with subsequent growth against the cerebellum rather than against the pons or oblongata. The value of X-ray pictures in determining the position of tumors is insisted upon, and the opinion is expressed that further experience will render this method of diagnosis of increasing value.

Pathogenesis of Multiple Sclerosis.—Siemerling and Racke (Archiv f. Psych.) offer a contribution to the much discussed subject of the pathology and pathogenesis of multiple sclerosis and conclude that in the patches of sclerosis, there is definite evidence of an inflammatory process which is related to the blood vessels. It first manifests itself by capillary hemorrhages, with slight but definite loss of fibrillae, with greater destruction of myline sheaths, whereas the overgrowth of glia is to be regarded partly as a reaction to the irritant and partly merely as a scar formation.

Influence of Salicylates on Thyroid Activity.—Waller, in The London Lancet, reports three cases in support of the statement that salicylates have a powerful influence against thyroid activity. One case was that of a normal adult who had an attack of acute tonsilitis. When first seen he had a temperature of 102° Fah., and a pulse rate of 120. He had headache, limb pains suggestive of rheumatism, or influenza. He was given a mixture containing 15 grain doses of sodium salicylate and half-dram doses of compound tincture of cinchona. But owing to inaccuracy in measuring the dases he frequently took 20 grains of salicylate and 409 minims of the tincture of cinchona every four hours. He then had a morning pulse rate of 48 and a temperature of 96° F. He had sweated profusely during the first night, and there was obstinate constipation which resisted strong doses of aperient. The pulse and temperature varied at the low level, and the bowels were still distinctly constipated, although the salicylate mixture had been left off. Thyroid extract in 2½ grain doses twice a day was then administered, and the temperature again rose to 101° F., and the pulse to 98. The throat progressed slowly. Twelve days later, in spite of full doses of strychnine, he had a pulse of 76, very soft and dicrotic, and a blood pressure of only 100 mm. of mercury.

Digalen.—Livrerato (Cronaca della Clinica Medica di Genova) says that digalen produces a rapid effect, which is one of its principal advantages in practice. It is well known that the infusions of digitalis act slowly, and that the effect is always produced by a latent stage of development. Such latent stage is considerably shortened by the employment of this preparation. Its rapidity in producing an effect proves its practical value in cases of unforeseen weakness of the heart, as appears in acute infections. Digalen exerted a considerable and constant influence on diuresis, the quantity of urine increased by three to four times the amount, at the same time the specific gravity decreased and the albumin disappeared. The diuresis continued to be copious during the next few days. Such increase in diuresis doubtless is a consequence of the rise in the blood pressure. The rise, however, ensues rapidly, and in the case of hypodermic injections of from 2 to 3 cc. it sets in in twelve to twenty hours after the injection. If still larger doses are resorted to, the effect on diuresis is even more pronounced, as well as a constant dulness and blood pressure.

Rheumatic Anaemia.—Drinkwater (Liverpool Medico-Chirurgical Journal) says that for many years he has been in the habit of prescribing a mixture of salicylate of soda and liquor ferri perchloridi in rheumatic conditions associated with anaemia, and especially in a kind of sore throat which appears to be of a rheumatic origin. In the affection the pharynx is slightly redder than normal, and there is pain, especially in swallowing. The mixture is made as follows: For an 8-ounce mixture, take one drachm of salicylate of soda dissolved in about two ounces of water. Add liquor ferriperchloridi half a drachm, with about an ounce of water. This produces a dark purple mixture, with a precipitate, thick and curdy in proportion to the concentration of the mixture. Then add one drachm of bicarbonate of potash dissolved in an ounce of water, and fill up to eight ounces with water. The precipitate dissolves on the addition of the potash solution, and the result is a clear claret colored mixture of an agreeable taste. The color is lighter still if a little more potash be added. Theoretically 218 grains of soda salicylate is equivalent to the iron in one fluid ounce of the liquor ferriperchloridi, but practically only about one quarter of the amount of iron can be used. If more liquor ferriperchloridi is used than in the above prescription, there will be an acute effervescence on the addition of the bicarbonate. With the above quantities there is no effervescence. The iron solution and the bicarbonate must not be mixed before adding the salicylate.

Digipuratum. Massalongo and Caspanui (Gazetta degli Osped e delle Clin.) state that the full digitalis effect appears only slowly if the drug is given by the mouth, since the glucosides of digitalis are only slowly absorbed. The subcutaneous administration will be preferred for many cases if one is assured that the preparation employed is a potent heart tonic. This applies particularly to digipuratum. The authors have had excellent results with injections of digipuratum in ampoules, tried on a large number of cases at the hospital at Verona. The effect was very rapid; as a rule, 3-4 injections were given during the first day. Owing to its rapid and most excellent action the authors believe digipuratum to be almost a necessity for the treatment of heart disease in certain forms.

Anaesthesia for Submucous Resection of the Septum. Jones (Brit. Med. Jour.) recommends the following The nasal passages are first sprayed with a 20 per cent. solution of cocaine hydrochloride to which an equal quantity of 1 in 1000 adrenalin chloride has been added. Afterwards both sides of the septum are swabbed with some 20 per cent. cocaine hydrochloride and adrenalin chloride, 1 in 1000, equal parts. There is then injected into the mucous membrane covering the septum a solution of 0·40 cocaine hydrochloride, 0·60 common salt, 200 distilled water (equivalent to 1-5 per cent. of cocaine hydrochloride in normal saline), to which is added two drops of adrenalin chloride (1 in 1000) to the cubic centimetre. The author reports three cases in which serious syncopal symptoms supervened after the injection of adrenalin in this way—a general anaesthetic being given at the same time. A preliminary injection of scopolamine and morphine should not be given as the morphine seems to inhibit the ischæmic effect of the adrenalin.

The Clinical Aspects of Tubal Gestation.—Mackenzie (Journ. of Obstet. and Gyn. of the Brit. Emp.) gives the history of one hundred and fifty-five cases of extra-uterine pregnancy. The Dr. finds, as we would expect, that a careful review of these cases does not bear out the accounts of the condition generally given in the text-books. The author finds that as regards age the most likely time for such a pregnancy to occur is between 25 and 30, and as regards duration of married life between the sixth and tenth years. In 15 per cent. there had been no previous pregnancy, while in 30 per cent. there had been only one child. In 80 per cent. there had been three or fewer previous pregnancies. The statement that in the majority of cases of tubal pregnancy a number of years has elapsed since the birth of the last child is not borne out by Mackenzie's statistics, for in 42 per cent. there was a two years' interval or less. Another common assertion, viz., that there is in most cases a history of previous pelvic inflammation, is also refuted, as in only 16 per cent. was such a history obtainable. He deals with the three common symptoms—amenorrhœa, vaginal discharge, and abdominal pain. There was no amenorrhœa in 25 per cent. This is a most important fact, because we must be prepared to diagnose tubal pregnancy in some cases in the absence of this important symptom. In only 4 per cent. was pain absent Of the others over 90 per cent. had a sudden severe onset of pain, and in most instances this was accompanied by red vaginal discharge. There is nothing characteristic about the discharge, and in only twenty-five is it definitely stated that a decidual cast was passed.

A New Conception of Parasyphilis.—Danlos (Presse med.) has considered parasyphilis affecting the nervous system and particularly locomotor ataxia and general paralysis, in bringing forward a new conception of parasyphilis. Tabes and parasyphilis are rarely seen except among syphilitics; but the disease is not in its florid stage when the phenomena show themselves. It is very rare during the occurrence of tabes or paresis to find the usual manifestations of syphilis. Never has the treponema been found in the nerve centers in persons dying from these manifestations. Specific medication, so useful in other syphilitic conditions has little value in tabes or paresis, and is even dangerous to the patients. If these manifestations are due to the occurrence of a cured syphilis it results from changes caused by the previous syphilis. It may act in two ways; either by rendering the soil more suitable for the growth of some other micro-organism, or by a change in the cerebrospinal fluid, which gives to the cord its nutrition. Immunity is allied with the production of antibodies. It is not illogical to think that parasyphilis is due to the impregnation of the system with an excess of these antibodies. This theory leads to interesting therapeutic deduction. Antibodies and complement must be injected to prevent injury of the tissues.

The Bloodless Treatment of Hemorrhoids.—Boas (Munchener medizinische Wochenschrift) mentions a method of treating certain classes of hemorrhoids which is based on the natural processes of resolution which often occur in this condition. The Dr. claims that the former teaching which regarded a prolapsed hemorrhoid as undesirable is entirely false, and that the reposition of these prolapsed veins interferes with natural resolution. According to his theory, a favorable cure can be brought about by the production of an artificial prolapse of these varicose veins by means of a Bier's suction cup. Those cases are selected for treatment in which a prolapse of the varicose veins can be readily secured by the application of the cup to the anus for a period of from thirty to sixty minutes and results in the production of a perianal edema, which cuts off the circulation in the varices and causes their gradual disappearance. This usually occurs within the first twenty-four hours and is ordinarily complete in from three to five days. The phenomenon as described is illustrated by a series of consecutive pictures. Boas claims to have used the method for a period of four years with very good results. The pain which is often present may be avoided by suppositories of codeine and belladonna and usually disappears before the third day. Where it is persistent, applications of aluminum acetate solution or an ice bag are usually effective. Excoriations are treated with dusting powder. One of the advantages claimed for the method by the author is the fact that it does not interfere with the bowel movements. Rest in bed during the first few days is advisable and the lateral position seems to be more effective than the dorsal.

Effects on the Heart of Soluble Digitoxin.—Moore (British Med. Jour.) calls attention to the unscientific nature of the use of infusion or tincture of digitalis. He says that in these preparations there are several bodies which act on the heart. The socalled physiological standardisation is unsatisfactory, because (1) there is no definite standard, such as an isolated glucoside of this class would give; and (2) the proposed standardisation test is a test of the "killing power," and physicians do not want to kill, but to cure. The author in this paper given the results of a careful experimental research, in which various digitalis preparations (including digitoxin, an isolated glucoside of the digitalis group) were employed. Two groups of experiments were conducted. In the first the preparation was injected intravenously, and in the second note was made of the effects of perfusion of the drug in saline solution through the isolated mammalian heart. Diagrammatic tracings are given indicating the effects of the drug on the heart-beats in the latter series. Among the conclusions arrived at by the author may be mentioned the following: present methods of standardisation of such drugs as digitalis rest on an erroneous basis, which presupposes a direct linear relationship between therapeutic dose and lethal dose, whereas in a varying mixture of active substances in a galenical preparation no such relationship need exist. The ratio of lethal dose to therapeutic dose may be defined as the factor of safety of a drug. In picking out from a mixture of active principles that one which is most advantageous therapeutically, the substance should be chosen which possesses the highest factor of safety, and not that one with the highest toxic action, and hence producing an effect in smallest quantity. The physico-chemical basis determining the toxicity of such a cardiac drug, as also the factor of safety, is the relative absorption, or combining powers for the drug, of the blood on the one hand and the cardiac-tissue on the other. The ratio of cardiac tissue absorption to blood absorption fixes the value of the coefficient of distribution, and on this the effect of the drug depends. Soluble digitoxin, on account of its solubility in water, can be used for intravenous injection. This solubility prevents any pain or local inflammation, such as is occasioned by injection of alcoholic solutions, and the low toxicity as compared with that of the mixed glucosides in tincture of digitalis renders intravenous admininstration safe. At the same time a full therapeutic effect, which is persistent, is obtained on the heart. In administering digitoxin (digalen) a full therapeutic effect should be aimed at, and therafter the drug should not be pushed further, but just enough given to maintain tne advantage by keeping pace with its elimination. The heart tracings show a pure digitalis effect is obtained on perfusing digalen, the therapeutic effect being marked, and the tonus at the end very considerable. The tracings also demonstrate the much higher coefficient of distribution of the drug in saline solution than in the blood. Soluble digitoxin shows none of that haemolytic action in destroying red blood corpuscles which is possessed by those sapo-glucosides which act on the heart, as, for example, the digitoxin present in ordinary tincture of digitalis.

The Sweat Glands in Puerperal Infection·Rebaudi, from a study of portions skin taken from the axilla of cases that had died from puerperal infection, discovered a degeneration of the sweat glands concomitant with that found in the liver and kidneys. The predisposing cause of this condition is the puerperal state and the determining cause are toxin and the exalted virulence of the bacteria which, generally saprophytic become virulent in cases of infection. All the emunctories of the body combine in an attempt to remove these poisons, and the sweat glands have an important part in this attempt. The result is a degeneration of the glands, beginning with vacuolization and ending with fatty degeneration and destruction of the epithelial lining The same changes are found in all infected cases; the difference being only in the degree and not in the kind of lesion.—Folia Gynecologica.

Miscellaneous.

The Therapeutics of Rachitis.

Among remedial agents promising benefit in rachitis, codliver oil, as exhibited in Cord. Ext. Ol. Morrhuæ Comp. (Hagee) is worthy of prominent mention. It not only has abundant value as a tissue nutrient, but its contained phosphorus makes it particularly potent in this condition. There is an urgent indication for this latter agent, which is admirably met by the administration of Cordial of the Extract of Cod Liver Oil Compound (Hagee).

Experiences with Kelene (Pure Ethyl Chloride) In General Anaesthesia, Major and Minor Operations and Obstetrics, 1902-07.

Kelene, as the purest ethyl chloride is technically termed, is now extensively used in Great Britain either as a general anæsthetic for short operations or as a preliminary to chloroform, ether or A. C. E. narcosis in major operations. In the Annus Medicus, 1902, of the Lancet, under the head of anæsthetics, a brief review is given of the progress made with ethyl chloride as a general anæsthetic, which has come to stay.

The success which has attended the introduction of Kelene has rendered however the caution of the Lancet against the indiscriminate use of highly volatile anæsthetics and particularly of mixtures under fancy names quite necessary. The favorable reports which have appeared during the past few years both in English and foreign literature on the advantages of ethyl chloride anæsthesia have been coincident with the introduction of and mainly based upon the employment of the absolutely pure ethyl chloride known as Kelene. Ethyl chloride without any impurities or additions can alone be relied upon to produce good results and many authors have particularly specified the above make of ethyl chloride on this account.

In the following pages we give a brief epitome of the reports, mainly from operators in English hospitals, which have appeared during the last few years.

"Induction of Anæsthesia" is the title of an account in Guy's Hospital Gazette for June 3, 1903, cf trials made with Kelene as a preliminary to ether, A. C. E., or chloroform. Several medical men who themselves have had other anæsthetics before, and others who have had as many as ten, have been anæsthetized by this method, and their opinions are valuable.

A New Diet For Typhoid Fever

Dr. W. M. Garton, of the United States Navy, reports his experiences in 175 cases of typhoid fever in the hospital at Norfolk, Virginia, especially in regard to the dietetics, which he observed. It is of particular interest that the author insnsted first of all upon the elimination of milk, because he was convinced many years ago that milk was rather harmful than beneficial in typhoid fever cases and had excluded it from their diet list long since. Garton argues further that overfeeding of nitrogenous food is a cause for increased bacterial decomposition and intestinal fermentation, mal-digestion and auto-infection The the absorption of toxic nitrogenous compounds causes an irritation of the vasomotor system and thereby a constriction of the blood vessels of the skin hence diminishing perspiration and heat radiation. During the fever the glycogen of the liver diminishes and if starchy food is not given it may entirely disappear—also the fat of the dody is the first to burn. Mal-digestion may develop an acidosis of the system or a diminished alkalinity of the blood (which in its turn diminishes the antibacterial resistance of the organism.—Editor) Shock or vaso-motor dilation, a not uncommon cause of death in typhoid fever. has been attributed to the absorption of the toxins from the intestines and their action on the adrenal glands. Absorptive toxins are more frequent and more serious in protein maldigestion than in starch maldigestion. Physiologie experiments have shown that the glandular secretions of the gastrointestinal tract in typhoid fever are diminished shown by dry mouth, coated tongue, sordes and sometimes acidity of the salivary glands. These conditions are remedied by lemonade and orange juice, and sodium chloride in the food.

With these facts in view, the outhor concluded that a minimum nitrogenous diet was indicated, and the results have justified his conclusion. A menu was formulated consisting principally of carbohydrates and fats that would meet the requirements of a minimum nitrogen-equilibrium. The principal articles of food which the author employed are coffee with sugar, without cream; zweiback or buttered toast; Jordan's Bethlehem Oats; Robinson's Patent Barley Flour (for which Johnson's Barley Flour made by the Minne-Paul Co. may be usefully substituted—Editor); buttered crackers; saltines; soup with beans, peas tomatoes, tapioca, etc., rice, Farina, Cream of Wheat, tapoica, and so forth. The special diet list must be seen in the original. This mode of feeding in typhoid fever impresses us as being a particularly sensible one and the author's results have fully vindicated his theoretical deductions.

An Address on the Varieties of Colitis and their Diagnosis by Sigmoidoscopic Examination.

P. Lockhart Mummery, F.R.C.S., London. Colitis is at the present time a name which is very loosely used to describe a number of quite distinct conditions.

Ulcerative colitis is a very distinct and definite disease, characterized by severe and intractable diarrhea, profuse hemorrhage, high temperature, and which seriously threatens life.

Follicular colitis appears to be a complication of other diseases such as cancer and stricture of the colon.

Tuberculous colitis is generally a late complication of phthisis.

Pericolitis, which causes a tight tubular stricture in some part of the colon, results from a slow fibrous change in the bowel wall.

There are also a number of specific types, peculiar to tropical climates.

Another is the so called chronic mucomembranous colitis, the chief symptoms of which are an excess of mucus in the stools, accompanied by abdominal pain, usually of a paroxysmal type and associated with chronic constipation. A collection of symptoms which are labeled as a disease and may result from a large number of entirely distinct pathological lesions. As:

1. Kinking and partial obstruction of the colon from adhesions or peri-colitis.
2. Dilatation of the colon and visceroptosis.
3. Chronic appendicitis.
4. Inflammation or displacement of the uterus or appendages.
5. Previous operations upon the abdomen resulting in adhesions.
6. Cancer of the colon.
7. Fibrous stricture of the colon.
8. Aneurysm of the abdominal aorta.
9. Floating kidney.

Many of these conditions are only an indirect cause of the symptoms in that, by causing accumulation of fecal material in the colon, they set up pain and excessive mucus secretion.

It is possible to distinguish three distinct types of inflammation of the mucosa.

In the hypertrophic form the mucous membrane appears swollen, due to submucous edema, and a paler color than normal, with much sticky mucus. One of the commonest forms is the granular, in which there is a markedly granular appearance of the whole visible mucosa, accompanied by considerable inflammation, giving the whole a dusky red color.

There is a third well-marked variety in which the visible mucosa looks as if it had been sandpapered; the normal glistening appearance has gone and the surface epithelium has apparently been removed, leaving a bright red surface, while here and there patches of yellow membrane can be seen adhering to the surface.

In cases of ulcerative colitis a sigmoidoscopic examination affords the only means we have of distinguishing this condition from cancer or villous tumor of the rectum, or from multiple papilloma of the rectum—conditions which exactly simulate ulcerative colitis in symptomology.

Most of the interest in colitis in this country centres round the cases of chronic mucomembranous colitis; and I should like again to insist on the importance of not considering this condition as a disease but as a symptom, and in the routine examination of all cases by the sigmoidoscope as a preliminary to treatment.—British Medical Journal.

Colotomy and Some Misconceptions of its Results.

Peter Daniel, F.R.C.S., London. There are few operative measures that engender in the mind of patients, nurses, and practitioners so much dislike as colotomy. The reason for this is not difficult to understand; yet this is eminently a life-saving and pain-saving procedure, and its evil repute is, I am quite convinced, not justified. Indeed, evils which are in no way due to the artificial anus but depend upon other factors are laid to its account, and it is the sifting of these quite extraneous evils from those inherent to the colotomy itself, and the placing of them where they rightly belong, which is my purpose today.

Even such an apparently old subject as the anatomy of the sigmoid and rectum, as taught even now in quite "up to-date" books, is wrong, in view of recent research by modern methods and advantages—I mean the gross anatomy; while the character of the vermicular action of the large bowel has hitherto been quite misunderstood, and upon this misconception I must strongly insist, because the normal expulsive movements of the large bowel are so exceedingly sluggish that they could not possibly give rise to diarrhea even in the absence of a sphincter; diarrhea means abnormal stimulation of the peristalsis, and not loss of sphincter control.

Supposed disabilities consequent on colotomy: (1) Loss of sense of desire to defecate, i.e., warning; (2) excessive number of actions, i.e., diarrhea; (3) loss of control over defecation; (4) excoriation of the skin; (5) the wearing of an apparatus; (6) the presence of an artificial anus on the abdomen.

The sense of warning in no degree depends upon the sphincters ani, but chiefly upon the relaxation of the lower sigmoid sphincter. Clinical evidence, derived from the sensations of patients who have colotomies, clearly shows that most of the successful cases have very definite warning of the impending action of their colotomies; while others learn by certain sensations, peculiar to each, and which are not normal warnings, when their bowel is going to act.

In effect this explanation of diarrhea in colotomy says the feces run away from the bowel because the colotomy opening has not a sphincter. The chief reason the patient has diarrhea, or even why he has more than one action, or at most two actions, of the bowel per diem, is that the mucosa of his colon is chronically inflamed. The best proof of this assertion is the result of treatment, even though the sphincter is still absent.

The best stimulant to bowel action is distention.

We find that colotomy is performed in a bowel already the seat of colitis. The author says that the most common cause of colitis is oral sepsis, that the comfort of a patient with colotomy is directly proportionate to the presence or absence of oral or nasal accessory sinus sepsis.

The many ingenious methods of endeavoring to manufacture a sphincter "to prevent diarrhea" are not only unnecessary but are bound to fail to effect this object—not even nature's sphincters can prevent diarrhea. The nearer the rectum the colotomy opening is placed the less do we reduce the storage capacity, and vice versa.

Conclusions in favor of colotomy: (1) There is ample warning of an impending stool; (2) if there is no oral or accessory sinus sepsis there is no diarrhea; (3) while regulating the diet permits of control of defecation; (4) skin excoriation is greatly reduced, but as this is also dependent upon the mucus exuded from the exposed mucosa it is not entirely done away with.

Removal of all sources of pus must be dealt with.

As regards the actual operation there are two chief points to be considered: (1) That the whole of the feces must be passed through the colotomy, hence the spur must be effective; (2) that prolapse of the bowel in the future must not take place.—The Lancet, London.

Transplantation of Segment of Small Intestine to Repair Resected Sigmoid Flexure.

In the case cited, W. S. Fenwick did a colotomy for cancer of the sigmoid. Three months afterward he resected the growth and did the following transplantation: A loop of ileum fairly low down was taken and a portion about 5 inches in length was double clamped off. The bowel was divided between the clamps and the mesentery, with great caution to avoid blood-vessels towards its root, for a distance of 2½ inches. The continuity of the small gut was next restored by uniting the cut ends in front of the mesentery of the freed segment. The segment of the small intestine, it was found, could easily be brought into excellent position between the cut ends of the large. It was decided to employ two Murphy buttons, no risk of leakage existing because the colotomy was above the proposed junctions. This was accordingly done and proved not very difficult. After the anastomoses were completed a few stitches were placed, drawing together the cut edges of the mesenteries to avoid the possibility of internal hernia. Finally, the abdomen was closed rapidly by interrupted fish-gut sutures, and a rubber tube, with some gauze packing, was inserted at the lower end of the incision. The whole operation, from first incision to the last stitch, occupied ninety minutes. There was little or no shock.

On the seventh day after the operation the Murphy buttons were found free, the upper in the colotomy, the lower in the rectum. Twenty days after the resection, an attempt was made to close the colotomy under local anesthesia (eucaine). This proved very difficult but was eventually effected. A normal motion was passed just over three weeks after the major operation. The bowels now move naturally every morning and the patient states that very little fecal matter comes through the fistula and then only when straining at stool. Throughout the rest of the day he suffers no inconvenience.—Brit. Med. Jour.

Adrenalin in the Treatment of Asthma.

Tranquili has used adrenalin in the treatment of spasmodic asthma with the following results: In 24 per cent. of the cases of essential asthma it had no effect; in asthma due to renal or cardiac disease it has no appreciable value; in reflex asthma it has a favorable effect whether used locally in the nasal mucosa or administered by the stomach or rectum or hypodermically. In one case preceded by gastric symptoms when adrenalin was administered by the stomach or rectum it had an abortive action, but by hypodermic injection it had no effect. If we desire to quickly stop an attack of asthma morphine is to be preferred to adrenalin. But the latter is preferable to nitrite of amyl, though less active than inhalations of chloroform or pyridin. When asthma is accompanied by cardiac dilatation adrenalin and oxygen, together with cold applications over the heart, are effective in stopping the suffering. Regulation of the diet and the administration of iodides between the attacks favor the action of adrenalin.—Gazzetta Medica di Roma.

Serotherapy of Pertussis.

Duthoit has been experimenting with a serum prepared at the Pasteur Institute of Brussels for the treatment of whooping-cough. He has as yet treated but twenty cases but the results have been encouraging. The serum was injected only after the author had seen the patients in a typical paroxysm, and no other medication was used. The author noted carefully the number of attacks of coughing that occurred for the few days previous to the beginning of treatment, the patient keeping a record of the attacks. About ten centimeters of the serum were injected in each case, that is, one dose being given. No preventive injections have yet been made. The injections were given as early as possible in the disease. All of the injected cases were among private or dispensary patients, excepting one, which was treated in a hospital. After the injection the number of paroxysms diminished, especially at night, together with the duration of each attack. The cough was shorter, the whoop was absent, there was less fatigue, and no vomiting occurred. Expectoration was facilitated and became mucopurulent. The author believes that the remedy is of distinct value in the treatment of this disease. No bad effects have been noted.—La Clinique.

Menstruation During Pregnancy and Lactation.

Grosse believes that the so-called menstruation that sometimes occurs during pregnancy is really a hemorrhage, occurring at various epochs, often near the normal congestive period which would correspond to menstruation, and lasting for from a few hours to several days. The anatomical position of the ovum closes the uterine cavity in such a manner that menstruation cannot normally occur. Hemorrhage is caused by a separation of the ovum from the uterine wall, a pathological condition of the membrane resulting from low implantation of the placenta, or an endometritis. Lactation when efficiently established is never accompanied by menstruation. But menstruation does not necessarily impair the quality of the milk nor harm the child.—Journal de Medecine de Paris.

Spread of Infection from Tuberculous Cervical Glands.

A. L. Turner states that as to the manner in which the tubercle bacilli pass from the cervical glands to the lungs two explanations have been offered; first, by way of the deep efferent cervical lymph vessels discharging into the thoracic duct upon the left side of the neck, and on the right side through the right lymphatic duct into the large veins, thence by the right side of the heart and pulmonary artery to the lungs; secondly, by an extension of the inflammatory process from the diseased inferior deep cervical glands directly to the pleura and apex of the lung. Experimental evidence has been brought forward in support of the extension of the tuberculous disease by the first or anatomical pathway, but the author has failed to bring forward pathological post mortem data in support of direct extension from the cervical glands to the apex of the lung.—Edinburgh Medical Journal.

Lumbar Puncture in Typhoid Fever

In a case of typhoid fever accompanied with intense and persistent headache, the authors practiced lumbar puncture. The first puncture confirmed the diagnosis of meningeal hypertension, but had no effect on the headache. A second, however, besides showing the presence of persisting, though lessened, hypertension, brought immediate and lasting relief. The authors are of the opinion that meningeal hypertension may be present in various acute infections without producing a definite group of symptoms pointing to the meninges, and urge, in view of the readiness with which lumbar puncture is now performed after a little practice, and its harmlessness, that this measure be availed of in infections when there are present evidences of meningeal hypertension, particularly violent and persisting headache, even when they occur as isolated symptoms, as in the case reported. —Oddo and Monges, Marseille medical; Bulletin medical.

The Vagaries of Medicine.

Several years ago a young man presented all the cardinal symptoms of a cerebral tumor—headache, vomiting and optic neuritis, and, in addition, there were symptoms of a bulbar paralysis, difficulty of speech, with dribbling of saliva. He was trephined, but with no appreciable benefit. His condition grew worse; he was unable to leave his bed, his limbs became more or less paralyzed, his headache was much worse, and the end was daily expected. With no special treatment, however, but simple careful nursing and attention, his symptoms abated, and in the course of a few months he had so far recovered as to be able to resume his former occupation of steword on a coasting steamer, and is today quite well.

A well known business man twenty years ago presented all the symptoms of diabetes mellitus—voracious appetite, intense thirst, and the excretion of several pints of urine daily which was loaded with sugar. He continued to eat and drink eagerly, frequently transgressing the strict rules of dieting for this condition. Ten years ago he had albuminuria and was pronounced by some London physicians to be suffering from Bright's disease, but the albuminuria all cleared up. Four years ago he had a severe attack of broncho-pneumonia with some peripheral neuritis. Today he is actively engaged in business, his urine still contains, and has always contained, a fairly large quantity of sugar, and has now a small amount of albumen.

A young Irish student who had not completed his Arts course was sent out to this country suffering from pulmonary tuberculosis. On arrival his condition was very bad; he was cyanosed, with much cough and expectoration, and presented the physical signs of consolidation and extensive excavation of the right lung. It seemed at that time that he had not long to live, but he at once set to work to get well. He has since passed through the Science course at a University, involving close attention to his studies in a city, and at present holds an important scientific post in Australia. It is impossible to recognize this man as the patient, crippled by tuberculosis, of ten years ago.

An old lady, now over 80 years of age, many years ago had an attack of hemiplegia which was possibly embolic in origin. Twenty years ago she had a weak, irregular heart, a feeble, at times, almost imperceptible pulse. She has had severe attacks of bronchitis, and a year ago was believed to be dying with an attack of "cold" and feeble heart. She is alive today, and has been quite recently able to do shopping in the city.

An alderman in one of the large cities in England was known by his medical attendant to have constantly a large amount of albumin in his urine, but he continued for more than twenty years at least, apparently in the best of health and taking no thought of what he ate or drank.

These are fair samples of what we may fairly call the vagaries of medicine. The patient with the symptoms of cerebral tumor should have died, but he recovered completely. By all the canons of medical diagnosis and prognosis, the patient who had diabetes and got an attack of Bright's disease should have died, or at least he should have rapidly sunk and died when he had an attack of broncho-pneumonia with a pulse of 150, but he did not. The recovery from advanced tuberculosis is an incident familiar probably to most physicians who are brought into contact with many tuberculous patients; nevertheless we do not look for complete recovery in cases of advanced tuberculosis. The prolongation of life in patients with organic heart disease, and albuminuria is also well authenticated, but, we repeat, that judged by the ordinary rules of diagnosis and prognosis these patients ought to have died years ago.

Now in the case of microbic infection, we know how varying is the amount of resistance which is offered by different patients to the progress of the disease. One patient attacked by the tubercle bacillus falls an easy prey and passes away with an acute tuberculosis. Another offers such resistance that the disease scarcely makes headway and soon goes on to arrest. In this class of disease we know that the defensive mechanisms of the body are actively at work, though we may not, perhaps, be able to accurately localize or define these mechanisms; and as a result of such activity we get a complete rout of the enemy and the restoration of the patient to health and strength.

These conditions, however, do not apply to such cases of brain, heart and kidney diseases, as appear to be able to keep the great enemy at bay for many years. What, then, is the explanation of these vagaries? The student learns from his text book the description of the various diseases under the headings of Etiology, Pathology, Diagnosis, Prognosis, Treatmdnt. He learns that in some diseases the prognosis is absolutely bad, and that the patient cannot survive very long. He goes forward into practice, with, theoretically, the different diseases in different pigeon-holes in his brain, and he tickets the patient with them, and gives the prognosis and treatment accordingly. But he soon finds that things do not work out quite in the right way, and he has to unlearn a good many things as he grows in years of clinical experience. He then realizes that diseases are not definite entities, and that he cannot always affix a definite disease ticket to his patient. In other words, it is the individual person and not the disease which he is called to treat, and that etiological conditions when applied to individual persons do not always induce similar, or equally severe pathological results. And so, while several persons may be attacked, for example, by the poison of "acute rheumatism," we know that the heart may be either not affected at all, or affected in very different degrees of severity or in different sites; and the physical condition of the tissues—that is, the state of the blood vessels, the processes of nutritional interchange, the vulnerability (whatever that may be), either hereditary or acquired (and these all specially influenced by varying nervous and mental states) will determine whether the heart will hypertrophy, or otherwise, react to the extra demands made upon it.

It is these unknown factors varying in different individuals which are responsible for the vagaries of medicine, and the practical lesson to learn is that we can never give a scientifically accurate prognosis, and that the older we get, the more surprises we will meet with in the various responses of individual constitutions to morbid processes.—The Australasian Medical Gazette.

Sloppy Diagnosis and Fees.

In most parts of the country, in the rural districts, the physicians complain bitterly of the smallness of the fees and the difficulty of collecting them.

This is, in part, no doubt, due to the parsimoniousness, which, for some reason, seems to be an affliction of the average farmer; but it is also, in part, due to the fact that the average country physician does not really earn any more than he gets; that instead of increasing his ability and efficiency, and raising his prices accordingly, he lets the quality of his services degenerate to match the size of the established fees in his locality, and, as a rule, they fall even below this level.

It pays a man to render the best services he is capable of rendering, for if he can really deliver the goods the people will soon become educated to paying his price for them.

The man who would merge from mediocrity must equip himself with a complete outfit for urinalysis, a sphygmomanometer, reagents for analysis of gastric contents, a microscope and the other necessities for making accurate diagnosis, and use them, and then charge for these services. Or, if he does not feel that he can spare the money for all these things at once, he must buy them one by one, meanwhile making use of the laboratory facilities which are now available in every city at a reasonable cost; and let his patients understand that the extra fees for these services are money well spent.

Let him eschew sloppy diagnosis and careless treatment as he would a pestilence. Let him first earn good fees, and he will soon find that it is no hard matter to collect them.—Geo. B. Lake, M. D., Ft. Sheridan, Illinois.

Prepare the Babies for Hot Weather.

During the month of June it is not a bad plan for the physician to take mental "stock" of the babies under his care, especially such as are bottle-fed, with the general idea of recommending such treatment as will tone up and vitalize those whose nutrition may be below par, so that they may enter the trying summer months in the best possible condition to ward off or withstand the depressing influences of extreme heat or the prostating effects of the diarrheal disorders of the heated term.

Careful attention to feeding is, of course, a sine qua non and the details of the infant's nourishment should be carefully investigated and regulated. But this is not all. Many bottle-fed babies are below standard from a hematologic standpoint. The marasmic anemic baby deserves special attention in the way of building up and restoring a circulating fluid which is deficient in red cells and hemoglobin. In the entire materia medica there can be found no direct hematic quite as suitable for infants and young children as Pepto Mangan (Gude). In addition to its distinctly pleasant taste, this hemic tonic is entirely devoid of irritant properties and never disturbs the digestion of the most feeble infant. Being free from astringent action, it does not induce constipation. A few weeks' treatment with appropriate doses of Pepto-Mangan very frequently establishes sufficient resisting power to enable the baby to pass through the hot summer without serious trouble, gastro-intestinal or otherwise.

The Neglected Therapy of Convalescence.

The physician of education and experience who keeps in touch with the progress of medicine generally, is well informed as to the treatment of most of the "thousand and one" ills that he is called upon to combat. The diagnosis and treatment of acute conditions as well as the successful management of the more chronic affections are subjects which he is constantly investigating and studying. It so happens, however, that after the dangerous shoals of medical navigation have been successfully negotiated and when the crisis or danger point has been passed, the physician is all too liable to relax his vigilance and to allow the patient to convalesce without sufficient attention to the therapeutic details of this important period. While the feeding of the convalescent is of great importance, the medicotonic treatment is equally essential, in order to improve the appetite, tone the digestive, assimilative and eliminative functions generally and to hasten the time when the patient shall be once more "upon his feet." Among all of the general reconstituent and supportive measures in the therapy of convalescence, none is more essential than the reconstruction of a blood stream of vital integrity and sufficiency. Pepto Mangan (Gude) is distinctly valuable in this special field, as it furnishes to the more or less devitalized blood the necessary materials (iron and manganese) in such form as to assure their prompt absorption and appropriation. One especial advantage of administering these hematinics in this form, is that digestive disturbance is avoided and constipation is not induced.

A New and Promising Agent for the Treatment of Rheumatism.

An announcement that is certain to cause widespread interest among the profession is being made in a large number of American medical journals in behalf of rheumatism phylacogen. The new product is a bacterial derivative originated by Dr. A. F. Schafer, of California. The term "phylacogen" (derived from two Greek words—the equivalent of "a guard" and "to produce") means "phylaxin producer," phylaxin being a name that is applied to a defensive proteid found in animals that have acquired an artificial immunity to a given infectious disease.

Rheumatism phylacogen (Schafer) is a sterile aqueous solution prepared from a large variety of pathogenic bacteria, such as the several staphylococci, streptococcus pyogenes, bacillus pyocyaneus, diplococcus pneumoniae, bacillus typhosus, bacillus coli communis, streptococcus rheumaticus, streptococcus erysipelatis, etc. The basic phylacogen is a "polyvalent" preparation, since the organisms are obtained from cultures made at frequent intervals and from a variety of sources. To this basic material is added an equal amount of the filtrate obtained by similarly growing and treating the streptococcus rheumaticus of Poynton and Paine. The product is indicated in all cases of rheumatism, acute and chronic, not due to gonorrheal infection. It is marketed in sealed glass vials of 10 Cc. capacity and may be administered subcutaneously or intravenously, the former method being preferred except in cases in which quick results are demanded.

Rheumatism phylacogen, which is the first of a series of phylacogens originated by Dr. Schafer and about to be offered to the medical profession, has been thoroughly tested clinically in many of the leading hospitals, as well as by competent specialists and other scientific men in various parts of the country, and is said to have shown brilliant results in a large percentage of cases. With the co-operation of Dr. Schafer, and in accordance with his methods, it is prepared by Parke, Davis & Co., in whom are vested the sole rights of manufacture and sale. Physicians who are interested in this new treatment for rheumatism, and every general practitioner ought to be, will do well to get descriptive literature on the subject. It may be obtained by addressing the manufacturers at their principal laboratories in Detroit, Michigan. Ask for the "Rheumatism Phylacogen pamphlet" and mention this journal.

Danger Due to Substitution.

Hardly another of all the preparations in existence offers a wider scope to imposition under the plea of "just as good" than the scientifically standardized Eucalyptol.

The most recent fraud practiced in regard to this product is an attempt to profit by the renown of Sander & Sons. In order to foist upon the unwary a crude oil, that had proved injurious upon application, the firm name of Sander & Sons is illicitly appropriated, the make up of their goods imitated, and finally the medical reports commenting on the merits of their excellent preparation are made use of to give the desired lustre to the intended deceit.

This fraud, which was exposed at an action tried before the Supreme court of Victoria at Melbourne, and others reported before in the medical literature, show that every physican should see that his patient gets exactly what he prescribed. No "just as good" allowed.

A Dependable Anodyne.

The uses of Papine are almost unlimited. In the main they are, however, diarrheal affections such as gastro-enteritis, cholera morbus and infantum dysentery; diseases of the nervous system attended with pain, such as neuralgia, neuritis, hysteria and locomotor ataxia; painful disorders of the utero-ovarian tract, as dysmenorrhea, uterine colic, ovarian neuralgia; and also other conditions attended with severe pain, such as biliary and renal colic, and the chest pains of pleurisy, pneumonia and tuberculosis. Papine has also been strongly recommended in the treatment of diabetes. This product has the great advantage that it can be used without locking up the secretions or inducing a habit, as is the unfortunate case with other opium preparations.

Congenital Rickets.—Labbe (Rev.mens. degyn., d'obst. et de ped.) says that children are both which show evidence of a process which has gone on in the uterus, resulting in pathological changes in the bones and deformities exactly similar to the rickets seen in later child life. The height and weight are less than normal. the abdomen is large and flaccid, the thorax is narrow and deformed, there are swelling of several epiphyses, curvature of the long bones, and anomalies at the base of the skill. The epiphyscal swelling affect the ribs, clavicle, knees, and radious. Fractures of the bones occur. The distinction between fetal and congenital rickets seem purely hypothetical. Some of the bones are soft and frible, explaining the fractures; others are hard and compact with absence of medullary canal. To assign a cause is quite difficult. The general opinion seems to tend toward intoxications, and poisons, such as syphilis, and other toxic-infections. The cause has acted during intrauterine life and the child is born showing the pathological results. There are several similar conditions, such as achondroplasia and periosteal dysplasia, that need to be differentiated from this condition. It seems possible that we have in them only several degrees of the same procees. as a result of greater or less virulence of the exciting cause, its longer duration, and greater intensity, combined with the resistance of the organism to its action. Mixed cases which show combinations of the different forms are not rare. One cause may be hereditary predisposition; another may be twin pregnancy; others are acute or chronic infections.

Congenital Flexion of the Proximal Interphalangeal Joints of the fingers. Fitzwilliams (Proc. Roy. Soc. Med.) calls attention to the condition of congenital flexion of the proximal interphalangeal joint or hook-finger. This is always most marked in the little finger, which is flexed to a right angel at the first interphalangeal joint, and resists any attempt to extend it beyond, though freely movable within this limit. The metacarpophalangeal and distal interphalengeal joints nearly always show a compensatory hyperextension, so that the deformity resembles that of a hammer-toe acquired in later life. The deformity, if it affects the ring finger, is less marked, while the other fingers usually escape; in severe cases, however, all the fingers are affected, but in a lessening degree from the fifth to the second digit. The condition is almost always bilateral. It is a developmental error. When seen early the treatment of the deformity consists in stretching the onterior liagments of the joint at fault by gentle and frequently repeated efforts at extension. If necessary to divide the ligament, it would be best affected by passing a fine-bladed tenotome into the joint from the side and detaching the ligament from the ftont of the base of the middle phalanx. This would not interfere with the insertion of the tendons in any way. The finger should then be kept straightened on a light splint.

The Hard Curds in Infants' Stools.

During the past few years the hard curds sometimes present in the stools of infants fed on cow's milk have been the subject of a number of interesting contributions. Previous to this time, these hard whitish or yeliowish masses were supposed to consist mainly of casein which had escaped digestion. Mainly on the basis of metabolism experiments which demonstrated the ease with which infants can digest the casein of cow's milk, Czerny and Keller concluded that these curds were not casein at all but consisted of soaps or fat. Later. Southworth and Schloss, Talbot, and Selter showed by chemical analysis that although these masses contained varying quantities of fat derivatives (neutral fat, fatty acids or soaps), they also contained a considerable amount of protein which was apparently casein. Opposed to this view were Meyer and Leopold (voicing the opinion of the Finklestein School). They claimed that whatever protein was present in these curds was derived from the intestinal secretion and not from the milk ingested. This point was finally settled by the experiments of Talbot, who demonstrated by the precipitine test that the hard curds did contain casein. Other investigators confirmed these results by means of the anaphylactic test. From the results of chemical analyses and metabolism experiments, Courtney (American Jour. Dis. Children, 1912, iii, 1) concludes as follows: 1. The hard or casein curds represent remnants of food, principally of protein nature, that have escaped digestion. 2. The exact mechanism of their formation as yet cannot be ascertained and they should be regarded as a peculiarity appearing in course of imperfect conditions of digestion. 3. The curds are not pathognomonic of any definite pathologic condition. 4. The loss of food occasioned by their formation and the impairment of general nutrition resulting from it is insignificant. 3. In attempting to correct the state of digestion one should be guided by the general rules of infant feeding, paying only secondary attention to the appearance or disappearance of curds from the stools.

Lumbar Puncture.—The diagnostic value of lumbar puncture has been firmly established, but its therapeutic value is not so generally known. H. Curschman always punctures with the patient lying on his side instead of sitting up and introduces the needle laterally. For diagnostic purposes, 8 to 10 Cc. should be withdrawn; for therapeutic purposes enough to restore the normal pressure of 120 to 150 Mm. water. Lumbar puncture is indicated in all cases of acute and chronic meningitis, meningismus and non-inflammatory increase of fluid. Really marvelous results are seen in the so-called serous meningitis, no matter whether the fluid is normal or contains more albumen with lymphocytes in the sediment. The condition is analogous to edema in other parts of the body and is often cured by a single puncture. though the patient's condition may appear very alarming. Meningitis due to influenza is often cured by puncture and the same may be said of meningeal inflammation following erysipelas, though streptococcus meningitis secondary to ear trouble is less favorably affected, and the epidemic type of the disease usually also requires the injection of serum. Irrigation of the spinal canal with sublimate solution has been recommended in cerebrospinal syphilis. The results are least satisfactory in tuberculous meningitis, though a few cases have been reported cured. Some brilliant results have been published in internal hemorrhagic pachymeningitis. Lumbar puncture has also been tried in a variety of other affections, such as gastric crises, chorea, epilepsy, tetanus, incontinence of urine, Meniere's disease, itching dermatoses, etc. The author could see no good effects in uremia, probably because the exudation is cortical and parenchymatous. The small operation is usually harmless, yet care is in place, particularly in nervous and hysterical patients. There is only one condition where lumbar puncture is serious and may be followed by sudden death, namely, in tumors of the posterior fossa. The high pressure will drop suddenly and the patient may become deeply cyanotic and cease to breathe while the heart will continue to beat for some time. The tumor is usually in the cerebellum or in the neighborhood of the aqueduct and the fall of pressuse resulting from lumbar puncture will force it agaiust the foramen magnum or fourth ventricle. In rare cases, there may be a hemorrhage into the tumor.—Therap. d. Gegenwart.

The Use of Sand Baths.

For some time I have been conducting experiments with the object of asertaining the value of sand baths as remedial agents. Unfortunately, there appears to be no available literature on the subject, which is strange, considering how extensively they are employed by native races, at least in Egypt, Nubia, and the Sudan. The various Arab tribes appear to have great confidence in their efficacy in all such painful conditions as are generally supposed to be of a rheumatic character, although they are employed by them as well in certain acute affections. They are very careful in selecting the only the yellow sand, the real desert sand, is it is held that the gray sand is not only useless, but may prove positively injurious and originate disease of various kinds. There is no doubt whatever about the truth of these observations. The yellow sand has remained where it is for thousands of years with but little change, whereas the is entirely different, as it shifts about, and is largely made up of dust and bebris of various kinds, with which is incorporated probably a plentiful supply of micro-organisms. The conditions where sand baths have been employed by me up to the present have been entirely rheumatic in nature' and there is no doubt that in such conditious there use is attended by very excellent results. The temperature of the sand varies, of course, according to the season, and in summer it is so high, even even two feet from the surface, that in the late afternoon it can only be borne at the commencement with a certain amount of discomfort. Briefly, the results obtained, or observed, were:

1. Marked diminution in pain and swelling.

2. Profuse diaphoresis, which was in proportion to the degree of immersion and the temperature of the sand.

3. A marked sedative effect; drowsiness at the time, and for an hour or two afterwards. Sleep was also better during the night.

4. Increase in pulse-rate, as well as a slight temporary rise in the temperature.

The marked alterative and sedative may be due to the continuous heat, uniformly applied to all parts of the body, but unquestionable another very important factor has also to be taken into consideration, namely, the development of a tangible and measurable electrical current. When a sensitive milliamperemeter was introduced into the circuit there was a distinct oscillation of the needle, which deflected after some minutes an appreciable current, due possibly to the increasing moisture of the skin. This is a matter, however, for further investigation.

I think it extremely probable that a prolonged course of sand baths in the desert would be of great value in chronic rheumatic and neuralgic conditions, as well as in, possible, case of insomnia and neurasthenia.—Gerry, British Medical Journal.

Discussion on the Diagnostic Values of Opthalmoplegia Partial and Total.—Russel. (British Medical Journal), discusses the diagnostic values of opthalmoplegias. His remarks bearing, as they do, upon a class of defect which is frequently forced upon the attention of opthalmic surgeons. He regarded paralysis of any ocular muscle, or group of muscles, as a certain sign of organic disease, But care must be taken that the deviation is really due to paralysis and not to syasm such as is common in the nystagmus of Thomsen's disease. Paralysis of an eye muscle not only postulates an organic lesion, but excludes many varieties of organic disorders of the nervous system, among them diphtheritic paralysis in which ophthalmoplegia externa is not found.

The mode of onset of paralysis is no reliable guide to the underlying disease. In insular sclerosis, paralysis is often sudden in onset, and may be transient in nature.

It is doubtful whether we can rely upon the significance of certain groups of ocular paralysis in the localization of the causal lesion in the medulla.

The speaker asked whether the phenomenon of reflew iridoplegia can be held to be pathognomonic of the parasyphilitic affections and general paralysis.

In the discussion which followed, Farquhar Buzzard, of London, said that the importance of the Argyll-Robertson pupil in the diagnosis of syphilitic and parasyphilitic disease could hardly be over-estimated. He emphasized the fact that the abolition of the light reflex, either unilaterally or bilaterally, often meant that there was was a lession of the third ventricle. When the sign was added to the classical signs of cerebraltumor, it was useless to operate for the growth would be found to be too deeply seated for removal.

Fruit Juices.—In the August number of Therapeautic Medicine, George Dow Scott advises fruit juices in infant feeding. Appreciating the value of fruit juices in infant feeding and in infant life, he is astonished at the unwise and empiric use of drugs and medicines during the first twelve months after birth. Castor oil, calomel and other medicines should be given at this period for a very short time, and only in very small doses. In fruit juices we have an ideal laxative as well as an ideal antiscorbutic. He begins by giving cooked fruit juices to the nursing infant, soon after birth if necessary, and continuing their use until the mother milk shows a proportional amont of proteid, carbohydrate and fat, and normal development of the infant is assured. The use of the fruit juices can be pushed according to the desire, the stools of the infant, the amount of urine excreted, and the general condition of the infant; long after the infant is well the juices can be continued as an efficient mild tonic. Efficient as these juices are to the nursling, the are even more valuable to the bottle-fed infant. Malnourished infants suffering from various disorders are brought back to health with the aid of these juices and a proper modification of milk. In infants suffering or convalescent from bronchopneumonia, lobar pneumonia and other diseases, fruit juices are well borne. They also favor digestive assimilation of foods, the diuretic action of the kidneys. and the cleansing of the enteric tract.—Indian Medical Record.

The Lymphatics of the Scrotum.—Morley and Manch, (The Lancet London,) arrive at the following practical conclusions; 1. In consequence of the very free anastomosis between the superficial lymphatic network of opposite sides, it is obvious that whenever an epithelioma approaches the median raphe the glands of both groins must be removed. 2. view of the termination of the medical trunks from the anterior surface in the supero-external glands, it is important that, when a growth approaches the anterior raphe, the subcutaneous tissne and glands should be removed to within one inch of the anterior superior spine of the ilium. He has seen recently a case in which a very determined attempt at a radical operation failed because the surgeon had not carried his dissection far enough in an outward direction. Recurrence took place within nine weeks of the operation in the extreme outer angle of the incision. 3. It is essential to remove the superficial inguinal glands and subcutaneous tissue in which they lie, from practically the whole of Scarpa's triangle and to carry the upper limits of the dissection well above the inner half of Poupart's ligament. To clear the triangle efficiently the upper three inches (7.5 cm) of the internal saphenous vein must be excised and the femoral sheath stripped clean. Many surgeons, will consider it their duty to aim at the ideal of complete removal of all possible malignant cells, here as elsewhere, and attention to the above description should provide the necessary anatomical data for an early case. It will rarelv be possible after such an operation to bring the skin completely together. As far as the necessarily denuded root of the penis is concerned, it will be possible to cover it in the uncircumcised by incising the prepuce on the dorsum (if there should be a tendency to phimosis) and utilizing the additional skin gained by its retraction. Apart from this skin grafting would be required.

Alcoholism and Pregnancy.

Gentili and M. Cambazzu made an experimental study of the effects of alcohol on pregnancy. They injected animals with alcohol intravenously and subcutaneously, and found that this drug caused prostration in the mothers and feebleness and lack of resistance in the offspring, which soon died. There were functional and organic changes in the chief internal organs of the poisoned animals. Pregnancy generally went on to full term, but sterility was caused by the continued injections in cases not yet fecundated. Pregnant animals were more seriously affected than the non-pregnant. Abortion was not caused by alchol, but in some cases the fetus was killed. Probably in the human race a degree of immunity to alcohol has been conferred by generations of alcoholic indulgence.—Annali di Ostetricia e Ginecologia.

Vasomotor Drug.

The studies of recent years have proven that paralysis of the peripheral circulation is responsible for many cases of collapse and sudden death, particularly in infectious diseases. In such cases, the autopsy may reveal a perfectly normal heart muscle and the cause of death may be apparent anatomically. Fortunately, we possess a number of drugs which are preeminently vasomotor stimulants and which may thus tide the patient over the crisis. Strichnine is very popular in England and America but has a cumulative effect so that there is some danger of convulsions where the medication has to be continued for a number of days. Caffeine is generally given in the form of a 20 per cent, solution of the sodium benzoate or salicylate compound (1Cc, every 2 hours). It interferes with the diastole of the heart to some extent, but causes dilatation of the coronary vessels. There is no danger iu giving this drug for several days in succession. though it should not be administered at night, since it may interfere with sleep. The effect of a single dose usually lasts 1½ hours. Camphor is one of the most valued vaso-motor stimulants in infectious diseases. Small doses (1Cc of the oil) are usually preferred to the larger ones recently recommended. The effect is generally apparent in one hour. Digitalis is usually not in place in infectious disorders unless a myocarditis is already present or develops as a result of long-continued fever, as in typhoid. Ether injected subcutaneously merely acts as a strong physical stimulant, yet alcohol, given by the mouth or by rectum, undoubtedly causes a certain degree of vaso-constriction. One of the most potent of the recent remedies undoubtedly is adrenalin, of which 1 Cc. of the 1:1000 solution may be injected subcutaneously. The effect appears in 10 to 15 minutes and usually lasts an hour. Where a very rapid and intense effect is desired, as in collapse after narcosis, the drug may also be injected intravenously, either as such or in a saline infusion. In infections this procedure may, however, be dangerous owing to the strain upon the heart and the sudden fall in pressure as soon as the effects of the drug wear off. It is probable that pituitrin has the same effect, but its action upon the vessels has not yet been sufficiently studied clinically.

The number of drugs possessing an opposite effect and relieving spasm of the vessels is large. They include all narcotics (both fatty compounds and alkaloids) and most antipyretics. Some have a selective action; thus alcohol will dilate the vessels of the skin and the antipyretics the vessels of the skin and brain. Veronal in very large doses will cause a general paralysis of the organs of circulation while chloral and chloroform affect principally the heart. Great care is therefore necessary in prescribing these sedatives in infectious diseases where they are best combined with a vaso-motor stimulant, such as caffeine. Drugs whicu act peripherally are the nitrites, xanthin derivatives (caffeine chiefly upon the coronary and cerebral vessels: theobromine compounds chiefly upon the renal vessels) and the recently recommended vasotonin, a combination of urethane with yohimbin. In most cases of chronic vescular spasms, indirect therapy is in place. Thus, if the hight pressure is due to an excess of carbonic acid in the blood, digitalis wlll do more good than vaso dilators.—Therap. Monatshefte.

Pituitary Extract in Obstetrics.

After using intramuscular injections of pituitary extract in a large number of cases the author concludes that the best time to administer the drug, in the first stage of labor, is when the os is a little less than the size of the palm, in primiparæ, and when it will just admit two fingers, in multiparæ. If given at a time when pains have not yet appeared its effects are but temporary and ineffective. But if given later, its action, which begins to show itself in three minutes, induces powerful, frequently repeated uterine contractions for about ten minutes; dur-

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ing this time the uterus remains in partial contraction in the intervals between pains. Later, the effect gradually diminishes, disappearing in an hour. The power of the contractions induced by full doses is shown in that the fetal heart rate may be more or less markedly reduced.

Employed in the period of expulsion of the fetus, pituitary extract, according to the author, will in many instances render the application of forceps unnecessary. Its use is clearly indicated in secondary uterine inertia and in cases where, owing to undue enlargement of the uterus because of hydramnios or twin pregnancy, the pains are ineffective. In febrile states it may also be employed. Where complications are expected after the birth of the child, an injection of pituitary extract a few minutes before the end of the second stage is to be recommended. On the other hand, if the birth of the child does not take place until about an hour after the injection, a possible hemorrhage is to be feared, and the patient must be closely watched.—Jaeger, Munchener medizinische Wochenschrift.

Anent the Wassermann Reaction.

As many physicians seem to believe that the complement deviation test is quite dependable as a diagnostic guide in syphilis, and this has led still more among the laity to think that there exists an easily applied blood test to determine accurately the presence of the disease, it can serve a useful purpose to call attention from time to time to the evidence which is accumulating on both sides of the question.

Among conditions other than syphilitic which it has been claimed may lead to positive reaction are now included: tuberculosis, leprosy, neoplasms, yaws, articular rheumatism, active malaria, and lead colic.

Plehn has studied the results of two hundred cases, in which the blood was examined without any history being known by the pathologist. In forty-two, giving repeatedly a positive reaction, nine had attained an advanced age without ever having had any but the very earliest manifestations. Yet in some of the negative reactions were cases with "flord" manifesof syphilis. He concludes that a positive reaction is no proof of the syphlitic character of any existing symptoms, while a negative reaction is not proof that they are not. He believes. with others, that the Wassermann reaction should be considered as one symptom only, and be given weight according.

While we believe that a proper interpretation of the reaction is of value, we hope for a general realization of the fact that it is far from being absolute and exact.—N. O. Medical Journal.

Effects of Salvarsan on the Blood Count.

These effects were carefully studied by the authors in 8 cases. Counts were made before salvarsan injection, two or three days after the injection, and again on the thirteenth to the fifteenth day. The authors found that at the second count the red cells had diminished in 5 of the 8 cases, but that at the third count an increase had taken place in 7 instances. This increase in 1 case (after two injections of salvarsan) amounted to 2,450,000; it averaged 500,000 to 1,000,000. The white cells, contrary to expectations, showed a diminution in 1 case amounting to 3700, at the second count. In 2 cases only did the white cells return to normal by the fifteenth day; in these there was a slight increase above normal—200 and 1000 respectively. The differential leucocyte count was but little altered; the mononuclear cells seemed to take a greater part in the leukopenia than the polymorphonuclears. The authors conclude that salvarsan would seem to exert a beneficial effect upon the anemia of syphilitics, in addition to its spirillocidal action. In a case of breast cancer (included in the 8 under investigation), the red cell count was lowered by the remedy. The effect on the white cells was not such as would lead to expect the production of a beneficial leucocytosis by it in infective disorders, medical or surgical. It should be tried, however, the authors think, in certain severe cases of septicemia, especially where there is marked anemia.—L. Thevenot and E. Brissaud, Progres medical.

Salvarsan and Labyrinthine Troubles.

Felix cites many cases treated with 606 in which there have been ear troubles more or less severe. He advances the question whether these troubles have been due to the use of salvarsan, or have occurred in spite of its use as a result of the syphilitic virus. There are cases in which the auditory symptoms existed before the use of salvarsan and others in which the labyrinthine troubles followed the use of the injections. Ehrlich believes that these symptoms are only a recurrence of syphilitic manifestations and not due to the use of arsenobenzol. The author concludes that in order to avoid auditory troubles we should make a very careful examination of the acoustic organs of every patient who is to be injected with salvarsan, and should exclude from treatment all cases that present auditory troubles, treating these cases with mercury. —La Presse Medicale.

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Carcinoma of the Cervix and Pregnancy.

Pisani reports a case of carcinoma of the cervix uteri in which pregnancy occurred. When labor pains began a Cæsarean section was performed and twins were delivered alive, after which the uterine body and ovaries were removed. The author considers that in such cases, in which the cancer is so diffused that cure is impossible, it is necessary to operate in the interests of the fetus. If there is a possibility of curing the mother by operation this should be done early, disregarding the interests of the fetus, whether it is viable or not. One should not await labor, nor should one induce it so as to operate by hysterectomy after or during the puerperium. The pregnancy should not be permitted to go to term. The best method of operation at any period of pregnancy is the abdominal one.—Rendiconti della Societa Toscana di Ostetricia e Ginecologia.

Edema Induced by Common Salt in Children.

It is now well known that in patients suffering from nephritis or from failing compensation in heart lesions, the presence of common salt in the diet exercises an important influence upon the occurrence of edema, and a "salt-free" diet is recommended, more especially by French physicians, in the treatment of edema resulting from these conditions. That the same phenomena may be observed in infants and children who are not the subject of renal or cardiac disease is less generally known. The matter is discussed in an interesting paper published in the "Munchener Medizinische Wochenschrift" of Nov. 21st by Dr. Franz Hamburger of Vienna. He states that in infants who are the subjects of acute or chronic disturbances of nutrition excess of salt may cause edema, even when there is no evidence of disease of the kidney or heart, and he records a case of similar nature in a boy five years of age. The child suffered from chronic digestive disturbance and neurasthenia. He was of emaciated and miserable appearance and was sent for a "cure" to Carlsbad, where he improved considerably. Shortly after his return he was brought to Dr. Hamburger, who found general edema and marked swelling of the prepuce. The urine was free from albumin and on examination a faint and variable systolic murmur was heard, which had often been observed before and was not regarded as indicative of any cardiac lesion. On inquiring into the diet taken by the child Dr. Hamburger found that the broth which the child had been given was very salty, and that it had caused considerable thirst. He ordered a diet poor in salt, and in three days the edema had lessened considerably, the child having lost 2¼ kilogrammes in weight during that time. The child is now completely sound and in good health. Dr. Hamburger has since found that in many children who are emaciated or cachectic or otherwise damaged by some illness, the administration of common salt will lead to edema, although the heart and kidneys may be healthy. Some cachectic children develop diarrhea after the administration of salt, in which case edema does not occur. These observations are of considerable interest and merit careful notice. As Dr. Hamburger points out, they suggest that in cachectic edema the casual factor may be some agency which disturbs the normal metabolism of salts. They also indicate a definite line of treatment in some cases of obscure edema in children, particularly those of supposed nephritis without albuminuria.—The London Lancet.

State Board Examination Questions of the State of New York.

ANATOMY.

1. Locate the following bony points: (a) processus mastoideus, (b) olecranon, (c) malleolus lateralis, (d) acromion, (e) spina ischiadica.

2. State the names and give the attachments of the muscles of mastication.

3. Describe the arteria femoralis as to (a) origin, (b) course, (c) branches.

4. Describe the vena cava inferior.

5. State the origin and give the course of the musculo-spiral nerve (nervus radialis) and mention the names of two of its terminal branches.

6. Describe the spleen and give its relations to surrounding structures and organs.

7. State the origin, course, and distribution to the stomach of the left vagus (pneumogastric) nerve.

8. Give the minute anatomy of the lobules of the liver.

9. What muscles are attached to (a) the posterior border of the ulna, (b) the spine of the scapula?

10. Give the topographic anatomy of (a) the internal abdominal ring, (b) the external abdominal ring.

11. Describe the articulation of the head of a rib, in the middle of the series, with the vertebræ.

12. Give a detailed description of the rectum. State the blood supply and the nerve supply of the rectum.

PHYSIOLOGY.

1. State the number of white corpuscles in a cubic millimeter of blood. State the function of white corpuscles.

2. State facts relating to the ratio between the oxygen absorbed and the carbon dioxide given off in respiration.

3. Describe the nervous mechanism of gastric secretion and of stomach movements.

4. Describe in detail each step in the digestion of a meal containing proteins, carbohydrates, fats, water, and inorganic salts.

5. Describe the character and the physiological function of the secretion of the sebaceous glands.

6. Which of the cranial nerves are nerves of special sense? Give the origin of each nerve mentioned.

7. Describe the advantages and the disadvantages of sugar as an article of diet for (a) those living a vigorous out-of-door life, (b) those living a sedentary life, (c) those who are poorly nourished.

8. Define a calorie. How many calories are produced by the average male adult in 24 hours?

9. Describe the development of the spermatozoa.

10. State the effect on respiration of (a) division of one phrenic nerve, (b) division of both phrenic nerves.

11. Describe the movements of the spleen and state what is known concerning its function.

12. State the average weight of feces evacuated by a normal male adult in 24 hours. What proportion of feces is (a) liquid, (b) solid?

CHEMISTRY.

1. Convert 41° Fahrenheit into centigrade degrees. State the Fahrenheit equivalent of zero centigrade.

2. Define (a) base, (b) salt, (c) acid. Illustrate, giving names and formulas.

3. Describe SO_2 as to (a) occurrence, (b) physical properties, (c) chemical properties, (d) uses as a disinfectant.

4. What is an alkaloid? What is the source of (a) atropine, (b) cocaine, (c) codeine?

5. Describe the process of manufacture of ethyl alcohol by fermentation and express in an equation the final reaction showing the formation of ethyl alcohol.

6. Describe a test for iodine.

7. Write the symbols of 10 elements and the formulas of 10 compounds, giving the name in each case.

8. State the physical and the chemical properties of ammonia.

9. Give the names, formulas, and chemical properties of three important potassium salts.

10. Where in the human system does lactic acid occur? How is lactic acid made?

11. Define carbohydrates and state their general properties. Where do carbohydrates occur in nature?

12. Describe chlorine as to (a) occurrence, (b) preparation, (c) properties, (d) important compounds. (e) chemical uses.

HYGIENE AND SANITATION.

1. Where should air inlets and air outlets for ventilating purposes be installed in a public hall? State reasons.

2. What are the essential requisites of a house water-filter?
house water-filter?

3. What diseases are specially liable to be conveyed by the ingestion of milk?

4. State the procedure for disinfecting mattresses, blankets, and other heavy material of the sickroom.

5. What changes are effected in meats that are boiled? What points are to be observed in preparing soups?

6. Should the dead be buried or cremated? State reasons.

7. What controls the period of infectiveness of a disease? Illustrate.

8. State the course and relate the sequelæ of a successful vaccination.

9. What action have bacteria on sewage? What is the septic tank method of sewage purification?

10. How may articles of food and of drink be made sterile and safe for ingestion? Illustrate the procedure by at least two examples.

11. What pathological changes ensue from the constant use of alcohol as a beverage? Mention diseases the predisposition to which is increased by the habitual use of alcohol.

12. What is glanders (equinia)? How may glanders infection occur?

OBSTETRICS AND GYNECOLOGY.

1. Describe the nature and the functions of the amniotic fluid.

2. Give the management of the after-coming head in breech presentation.

3. Give the technique of obstetric asepsis and antisepsis during (a) pregnancy, (b) parturition, (c) the puerperium.

4. What are the causes of cystitis in the female? Describe methods of examination of the bladder of the female.

5. Give the management of the third stage of labor.

6. Differentiate erosion of the uterine cervix and ulceration of the uterine csrvix. Give the etiology of each condition.

7. Describe the management of the various forms of placenta prævia.

8. Give in detail the immediate treatment of a severe laceration of the perineum.

9. Give the causes and the management of prolapsed cord.

10. What are the indications for the use of obstetric forceps?

11 Give the etiology of mastitis. What prophylactic measures should be applied to prevent mastitis during the puerperium?

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12. Differentiate the ordinary morning sickness of pregnancy and the pernicious vomiting of pregnancy. What are the causes of the pernicious vomiting of pregnancy and what relation do they bear to the management of the condition?

SURGERY.

1. Describe tuberculous peritonitis. Give the surgical treatment of tuberculous peritonitis.

2. Give the surgical management of impacted fracture of the neck of the femur.

3. Give the technique of ether anesthesia. State the precautions to be observed and give the dangers and the danger signals in ether anesthesia.

4. Differentiate chancre and chancroid.

5. Discuss the dangers of expectant treatment of acute appendicitis.

6. Describe cholelithiasis and give its surgical treatment.

7. Give the surgical treatment of extensive burns.

8. Describe anthrax and give its surgical treatment.

9. Describe the operative technique and the after treatment of penetrating wound of the stomach.

10. Describe a mechanical method of treating shock due to hemorrhage.

11. Give the signs and the symptoms of ectropion and state methods for its surgical relief.

12. Describe the objective and the subjective indications of compression of the brain.

DIAGNOSIS.

1. Describe the physical signs and the symptoms of acute pericarditis before and after effusion.

2. Give a clinical picture of epidemic cerebrospinal meningitis.

3. State the symptoms and the methods of diagnosis of dilatation of the stomach.

4. Describe the signs, symptoms, and usual course of toxic (commonly alcoholic) cirrhosis of the liver.

5. State the signs and the symptoms that warrant a diagnosis of diffuse (general) arteriosclerosis.

6. Give the clinical history of an average case of acute articular rheumatism.

7. State the symptoms of pus formation and retention.

8. In what diseases may enlargement of the spleen occur? Describe the methods of determining and identifying an enlarged spleen.

9. State the result of a microscopic examination of the blood in (a) typhoid fever, (b) malarial fever, (c) trichinosis.

10. Describe herpes zoster.

11. Differentiate cardiac asthma and bronchial asthma.

12. State the physical signs and relate some of the causes of ascites.

PATHOLOGY.

1. Describe the pathological changes in (a) simple fibrinous pleuritis, (b) serofibrinous pleuritis, (c) suppurative pleuritis.

2. What is the microscopic appearance of the affected tissues in acute hyperplastic splenitis?

3. Describe the alteration in structure of the mucosa in acute catarrhal enteritis.

4. How may carcinomata be disseminated through the lymph channels? State the appearance of the lymph vessels under such conditions.

5. Describe the hematozoon of estivo-autumnal malaria and give its life history.

6. What organism is the probable exciting agent in syphilis? Give the macroscopic and the microscopic appearance of a syphilitic gumma in the liver.

BACTERIOLOGY.

7. In a suspected case of pulmonary tuberculosis what laboratory methods should be employed to establish the diagnosis? Give the methods in detail.

8. What are pathogenic bacteria and by what means do they incite disease processes? Does cultivation on artificial media affect the virulence of pathogenic bacteria? Illustrate.

9. Describe in detail Gram's method of staining. Mention two species of micrococci that may be distinguished from each other by this method.

10. State the general characteristics of Bacillus pestis. How may a pure culture of Bacillus pestis be obtained?

11. Mention three pathogenic anaerobic bacteria that may be conveyed from the soil.

12. What is disinfection? Give in detail a method of determining the strength of a fluid disinfectant.

Cardiac Failure Treated by Cane Sugar.

I first saw my patient, a lady aged sixty-two years, in July, 1910. She had been trying to lead her usual life until the day on which I saw her, but for two years she had noticed that she was increasing unable to do what she had been in the habit of doing.

The cardiac impulse was displaced considerably outwards, and was very feeble; the pulse was about 120, and feeble, though regular. There was an aortic systolic, but no mitral murmur;the sounds were "tic-tac" in character and faint The heart was obviously hypertrophied and dilated. Her symptoms were marked; she had no energy, although naturally a most energetic person. She was now incapable of the slightest exertion, either mental or physical. Her blood pressure was 175 mm. Hg, but rapidly came down to normal under treatment, and was not at any time markedly abnormal. The urine was in all respects normal. There was no œdema.

For the next eight months she was treated with the usual cardiac tonics,such as strychnine, strontium iodide, arsenic and strophanthus, and great stress was laid upon fresh air.

In March, 1911, improvement was marked, but she could, even then, only walk about half a mile at a stretch, and was very easily tired, both mentally and physically. Her pulse was now about 90 and her heart sounds fuller and less "tic-tac" in character.

Shortly after this it occurred to me that my case was just the one for a trial of the sugar treatment. My patient being inclined to stoutness had always particularly avoided sugar, taking none in tea or coffee and having all puddings, fruit tarts, and milk puddings made without sugar. She was very averse to trying the treatment, being, as she expressed it, "gouty," and feeling sure that it would make her worse.

From April 22 to 29 she took one ounce of the sugar at breakfast and one at afternoon tea; total, two ounces daily.

From April 30 to May 6 she took one ounce at breakfast, one half ounce at lunch, one ounce at tea, and one-half ounce at dinner; total, three ounces daily.

From May 7 to May 21 she took one ounce at breakfast, one ounce at lunch, one ounce at tea, and one ounce at dinner; total, four ounces.

From May 22 to May 28 she took three ounces daily, and from May 29 to June 2, two ounces daily. On June 2 she started for Nauheim, and had gradually lessened the amount of sugar in case her doctor (Professor Groedel) at Nauheim should not wish her to take it.

Her diet was as follows:

Breakfast: Coffee, lean tongue, kedjeree or boiled egg and two pieces of thin toast. No butter, bacon, or fat of any sort.

Lunch: One piece of dry toast, spring cabbage, brocoli, or asparagus, with boiled fish or boiled mutton or boiled chicken. No fats and no sauces, and always rice boiled in a little milk or water, the sugar being taken in this rice. No fruits or acids were taken.

A tumbler of hot water was taken one hour before lunch and one hour before dinner; nothing to drink at either meal.

Afternoon Tea: Two slices of dry bread with sugar on it and a little in a cup of tea. No cakes, jams or butter.

Dinner: Much the same as lunch, only "force" instead of rice with which to eat the sugar. No fruits, sauces or fats.

Taking the sugar in this way, she experienced no inconvenience, no flatulence, and no indigestion, but any departure from this strict diet quickly caused indigestion. She completely lost what she called her "goutiness," and no sugar was at any time found in her urine.

Her improvement began to be obvious after the middle of the second week, and by the end of the fifth week it was remarkable. The pulse was steady and stronger and normally 72 to 78; it was not abnormally altered by exertion, and quickly resumed its normal rate after rest. Blood pressure was 125 m.m. The first mitral sound was stronger, and altogether of better quality. She could walk nearly three miles without a rest or undue fatigue, and a very short rest completely restored her. Her mental vigor was quite re-established, and her feeling of well-being and "fitness" after the months of weariness and lassitude was really extraordinary.

She is still taking two ounces of sugar daily and maintaining her great improvement. Her diet is not now nearly so strict, but she still drinks nothing at lunch or dinner. Her weight remains about stationary. —Carter, British Medical Journal.

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Causes for Infant Mortality.

Before the International Congress for the Hygiene of Dwelling Houses in Berlin, Germany, Dr. Babinsky said: "(1) Intestinal diseases are essentially the deciding factors of the mortality of infants. (2) There are certain ill-effects proceeding from increased temperature that play a part in the increased infant mortality. These must, however, experience a certain summation to be able to set up a sudden violent effect, whence it happens that it makes itself felt eight to fourteen days after the onset of the hot weather. (3) It is mostly infants whom this increased mortality affects, and amongst them those who are not fed at the breast, as the proportion of 5.1 shows. (4) The dwelling itself plays a part in the increased mortality. The greatest mortality lies in the front four-storied houses, in court dwellings, in cellars, and ground floors situated immediately above bakehouses. (5) There was some connection, therefore, between infancy, improper food, and high temperatures and high mortality that led to a suspicion of the action of injurious microbes that set up mischief in children that were brought up on artificial food." This was the position the speaker took up in 1875, and he still believed it was a correct one.—The Medical Press and Circular, London.

Typhoid Germs Thirty-Eight Years in the Body.

At the Gesellschaft der Arzte, in Vienna, Austria, Clairmont presented a female patient, aged forty-nine, from Eiselberg's wards, who had typhoid fever when she was eleven years of age of a severe type. After recovery or in the convalescent stage she took on a form of cholelithiasis, cholecystitis, and peri cholecystitis, with finally complete closure, that brought her to hospital. The operation revealed a large tumor the size of a large hen's egg, hard and thickened with an old chronic inflammation of the wall of the gall bladder, which was adherent to the anterior wall of the abdomen, colon and stomach. The mucoid gall contents of the thickened bladder contained the typhoid bacilli, from which pure cultures were obtained. In this case she had carried the typhoid bacilli about with her thirty-eight years.—The Medical Press and Circular, London.

Purpura in Infantile Diarrhoea.

Our own experience is borne out by the report of cases by Rollestone before the Royal Society of Medicine. From an analysis of one hundred cases of acute diarrhoea sufficiently severe to be admitted into the Victoria Hospital for Children it was found that purpura occurred in eleven, all of which were fatal; the prognosis of these cases was therefore extremely grave. In eight ol the eleven cases the purpura was on the abdomen; possibly the extremely low blood pressure and the horizontal position of the patients explained why the purpura occurred on the trunk rather than on the limbs. The purpura occurred on an average on the thirty-fourth day of the diarrhoeal disease and seven days before death; purpura was therefore a late and cachectic manifestation in diarrhoea of infants. The purpura was not caused by transfusion or by the use of serums.—The London Lancet.

A New Organism of Chronic Dysentery

In the Journal of the Royal Army Medical Corps, Major W. S. Harrison describes a case of chronic dysentery following an acute attack which originated in Morocco. The clinical course of the case was quite typical of a fairly severe infection;the initial attack had been acute, and in the subsequent chronic stage the general health was much deteriorated. From the stools a bacillus was isolated in almost pure culture, having characters which seem to show that it has not been hitherto described. Bacillus coli was conspicuously absent, and Flexner's bacillus was found only once in thirty colonisations. The patient's serum failed to agglutinate laboratory strains of Flexner's and Shiga's and paratyphoid bacilli; but it agglutinated the bacillus isolated from the stools, in a dilution of 1 in 60 in an hour. No blood cells or amœbæ were found in the stools, which were watery and very offensive. The patient was carefully dieted, and the colon was regularly washed out with saline and quinine solutions. In addition he received weekly doses of 100 million of the bacillus which was present in such numbers in the stools. Under this treatment he soon got quite well, and in three weeks the unknown bacillus disappeared and its place was taken by bacillus coli. It seems evident that this bacillus must have been the cause of the dysentery; a long account of its cultural characteristics and of its effect upon animals is given.—The London Hospital.

Therapeutics of Sugar.

Sir J. Sawyer records that he has used cane sugar freely and frequently during the last ten years or so with success in a variety of morbid conditions. In wasting disorders, in various forms of anemia, in adynamic varieties of rheumatism and specially in the neurasphemic manifestations of neurotic persons he has found the contiuued ingestion of cane sugar markedly beneficial, increasing weight and power, and appearing to act not merely as a nutrient but also as a tonic in the best senses of that word—namely, as a very valuable medicine, the continued administration of which in debilitated and relaxed conditions of the body imparts strength and vigor without producing any sudden excitement, and as a corroborant gently stimulating the vital energies to an aroused action by a kind of mild stimulation, slowly produced and permanent in effect.—British Medical Journal.

Renography.

E. H. Penwick describes his method of x-ray diagnosis of movable kidney. The diagnosis of movable kidney is not difficult when the kidney is palpable. But in the more important group, those kidneys which do not drop greatly but which rotate on an anteroposterior axis, and in doing so kink the fixed ureter and induce back pressure, it may not be possible to palpate kidney. In this case radiography is of aid. It is easily done if an oxalate of lime stone chances to be in the pelvis, for its shadow rises and passes inward on forced inspiration. But if there is no oxalate of lime stone, if collargol is injected into the renal pelvis one will obtain a shadow. On the movement and the contour of that shadow in inspiratory effort, whether it opens out or becomes restricted in outline, whether it moves in and up or out and up, will be demonstrated the movements of the kidney. Pyelography will open up a hitherto closed book of problems in the causation of the pathology of surgical affections of the kidney, and its pages will surprise and charm the worker and render renal surgery more accurate, and therefore more beneficent, than has hitherto obtained.—British Medical Journal.

Relationship of Syphilis and Tuberculosis.—Gouget (Journ. des Praticiens) says that while tuberculosis does not predispose to syphilis, the latter certainly does to tuberculosis. Although it has been noted that laryngeal or tracheobronchial syphilis has actually resulted in the implantation of the tubercle bacillus, this is not so usual. It is rather the debilitative effects of syphilis which predispose to tuberculosis. Patients in the secondary stage are much more susceptible than old and tertiary syphilitics, unless, indeed, in the latter case there are suppurative lesions, tabes, or general paralysis. Sergent, after careful investigation of the matter, is stated to have come to the conclusion that tuberculosis is intimately bound up with syphilis, although the latter may be only a remote antecedent. Statistics go to show, however, that the influence of syphilis in this connection is less than that of alcoholism. When tuberculosis attacks a syphilitic it does not result in a mixed lesion. Each disease keeps its own proper sphere, and the author quotes cases in which the same lung showed tuberculous nodules at the apex and syphilitic nodes at the base. If the patient is already in an advanced stage of tuberculosis an intercurrent attack of syphilis will hasten the fatal issue. Sergent believes that the engrafting of syphilis upon a tuberculous patient hastens the beneficial tendency to sclerosis. He says that this can only happen in the tertiary stage, when the patient has already passed through the earlier phases of the disease. Speaking generally, the advent of tuberculosis in the case of a person passing through the secondary stage of syphilis carries with it a bad prognosis, frequently resulting in a galloping consumption. The tendency to sclerosis, however, in later syphilis delays the progress of tuberculosis, and the existence of a high arterial tension in tertiary syphilis is also of favorable import. The treatment of a patient with these two diseases running concurrently raises some important points. The evidence goes to show that treatment by mercury is not, on the whole, contraindicated by the existence of tuberculosis. In this connection the author discountenances the giving of mercury per oram. He advocates daily injection of a soluble salt of mercury, such as the benzoate or biniodide. The ordinary regional treatment of tuberculosis is also, of course, carried out.

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In cases of impaired appetite, gastro-intestinal atony and disorders of digestion due to subnormal secretory activity, Colden's Liquid Beef Tonic

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in arousing the appetite, stimulating the gastric glands, increasing the digestive secretions and the activity, indeed, of all the gustatory organs. When Anæmia is a complication, Colden's Liquid Beef Tonic with Iron is indicated. Sold by druggists.

Sample with Literature will be sent to physicians on request.

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Programme of Ninth District Medical Society, Held in Salisbury, N. C. May 2nd, 1912.

The meeting was called to order at 2 o'clock, p. m., by Dr. W. L. Crump, chairman local committee of arrangements.

Prayer by the Rev. Dr. Byron Clark.

Addresses of welcome:

By the public, Hon. Theo. F. Kluttz.

By the medical fraternity, Dr. John Whitehead.

Response, Dr. Thos. E. Anderson, Statesville.

Temporary organization.

Object of the District Society, Dr. D. J. Hill, Lexington.

The Value of Education in Society Work, Dr. J. E. Stokes, Salisbury.

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CHICAGO ILLINOIS.
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Medical Department.
LOYOLA UNIVERSITY
Semesters 1912-1913.
Summer term begins June, 6, 1912. Fall and Winter term begins October 1, 1912.
Spring term begins January 25, 1912.

(*Any two semesters complete the annual term*)

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The Summer term of Bennett Medical College consists of a session of sixteen weeks. The same studies are pursued as in the regular course and time and credits will be allow for all work covered.

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Those contemplating the study of medicine and not having necessary credits, should write regarding Residential and Home Study Courses as conducted under the auspices of the University.

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Ectopic Pregnancy, Dr. C. Banks McNairy, Lenoir.

Immunization in Tuberculosis, Dr. C. A. Julian, Thomasville.

The Care of the Ear, Dr. R. Vance Brawley, Salisbury.

Miscellaneous business.

Election of officers for the ensuing year.

Selection of place of next meeting.

Announcements.

Adjournment.

6 p. m., Auto ride over city.

EVENING SESSION, 8 P. M.

The evening session was for the public in general. Ladies cordially invited.

Conservation of the Child, Dr. A. A. Kent, president State Medical Society, Lenoir.

Discussion opened by Dr. John A. Ferrell, assistant secretary State Board of Health, Raleigh.

Public Health and Preventive Medicine, Dr. C. M. Van Poole, Salisbury.

Discussion opened by Dr. W. S. Rankin, secretary State Board of Health, Raleigh.

Installation of officers.

Closing remarks.

Adjournment.

10 p. m., Smoker.

Link the Past with the Present.

J. Marion Sims many years ago said, "For severe Dysmenorrhea I have found Hayden,s Viburnum Compound of great service."

What was true as to the therapeutic value of Hayden's Viburnum Compound in the time of Sims is just as much of a fact today. As a remedy in the treatment of Dysmenorrhea, Amenorrhea and other functional irregularities of the uterus and its appendages, H. V. C. is dependable in action, and as it is of known composition and contains no narcotics it is safe to prescribe.

As a uterine tonic and autispasmodic it is of particular service, and to any physician who desires to clinically demonstrate its therapeutic action samples and literature will be forwarded upon request to New York Pharmaceutical Co., Bedford Springs, Bedford, Mass.

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Sterilization.—The Medical Society of Louisiana recently adopted resolutions urging the enactment of a law to provide for the sterilization of all criminals, male and females.

Robinson's Phosphoric Elixir.—A modified and improved form of Chemical Food. This compound represents the full therapeutic value of Phosphoric Acid and the above named Phosphates as a remedy for Nervous Exhaustion, General Debility, Deranged Digestion, Etc. Robinson-Pettet Co., incorporated. See their advertisement this issue.

CHEMICAL FOOD is a mixture of Phosphoric Acid and Phosphates, the value of which physicians seem to have lost sight of to some extent in the past few years. The Robinson-Pettet Co., incorporated, to whose advertisement (on page xiv) we refer our readers, have placed upon the market a much improved form of this compound, "ROBINSON'S PHOSPHORIC ELIXIR." It's superiority consists in it's uniform composition and high degree of palatability.

Solitary Hepatic Abscess in Pregnancy.

Chavannaz and Loubet (Rev. de gynec. et de chir. abdom.) have studied a series of cases where a large and single abscess developed and set up symptoms during pregnancy. This condition simulates the big tropical abscess, and must not be confounded with the more frequent suppuration of the liver not unknown after puerperal infection, where numerous collections of pus are scattered over its substance. The solitary abscess, however, seems to be a very deadly complication—as bad, in fact, as disseminated suppuration. Five cases, including one under Chavannaz and Loubet's own observation, have been recorded with fairly complete details. Neither dysentery, typhoid, or appendicitis had troubled any of the patients. In none was there any evidence of injury. Careful observation seemed to prove that the abscess began to develop during pregnancy in all the collected cases. The infection, no doubt, arises in the intestine. In pregnancy and the puerperium the virulence of the Bacillus coli is greatly increased, hence the frequency of autoinfection. It is, therefore, rather remarkable that the complication in question is rare. The abscess is nearly always single. The amount of pus was considerable—at least half a pint—whilst in one case the liver was almost entirely converted into a vast abscess cavity. In three the pus was sterile, and in one only were microbes found in quantities. The Bacillus coli abounded, and there were staphylococci which seemingly played a secondary part in the infection. Local pain in the right hypochondrium or base of the right thorax is the chief symptom, and it is generally severe, but does not radiate to the shoulder. Dyspnœa and fits of coughing without hiccough seem frequent. In no instance was distinct jaundice reported. The prognosis is very bad. In the author's case the patient suffered from eclampsia and glycosuria, the abscess developing in the puerperium. It was incised, and fortunately there were free adhesions protecting the peritoneal cavity. Over three pints of pus came away. Seven months later the patient seemed well and had gained flesh. Free incision is the only treatment for large abscess of the liver in pregnancy.—British Medical Journal.

Ointments, with Special Reference to the Substances Used as Bases.—Wild (British Medical Journal has made a number of experiments to determine the relative protective and penetrative powers of the various bases, and also the extent to which certain active drugs were absorbed by the skin when applied to it in the various combinations. The experiments were made by rubbing a carefully weighed quantity of the ointment or base into a definite area of skin for a fixed time. The ointment was then scraped off the rubbing finger and the surface of the skin by a dulled Gillette safety razor blade fixed in a convenient handle, and again weighed. To avoid the necessity of wiping the instrument, the scraper is weighed with the ointment both before and after rubbing. With a little practice, consistent results may be obtained. The loss of weight represents the amount of ointment absorbed, together with the amount lost in manipulation; as the latter is fairly constant in dealing with preparations of a similar consistency, the results afforded a relative indication of the respective amounts absorbed. There may, of course, be a possible slight gain from secretion and epidermis removed from the skin by scraping, but, if the skin be dried before the rubbing, experiment has shown that this factor may be neglected, as it is the same for each application and does not affect the relative results.

These experiments are still in progress, but sufficient results have been obtained to confirm the generally accepted views as to the relative penetrative powers of the usual bases.

Soft paraffin and paraffin ointment appear to be hardly absorbed at all, but remain on the skin as a protective layer for a considerable period. Lard and olive oil are absorbed to a considerable extent, about 15 per cent., after two minutes' rubbing. Hydrous wool-fat, 20 per cent., provided the proper amount of water is present; old samples partially dried are less absorbed. Owing to its powerful adhesive properties, no reliable result was obtained from anhydrous wool-fat.

The greatest loss of weight occurred from a mixture of equal parts of glycerin of starch and hydrous wool-fat, which is a useful base when a comparatively non-greasy emollient is required.

The CHARLOTTE SANATORIUM

LABORATORY-DEPARTMENT

CHARLOTTE, N. C.

The attention of the physicians and surgeons is called to the advantages which this institution offers in methods of laboratory diagnoses.

Many physicians through lack of time, technical training or laboratory equipment find it difficult to utilize the many methods of microscopic and clinical examinations so essential to a proper diagnosis.

To the physicians and surgeons of the Carolinas and Virginia, the Charlotte Sanatorium Laboratory offers, at moderate cost, facilities for such examinations. Animal inocculation, chemical, bacteriological and histological examinations will be made as the case requires.

The Main Building Front View.

The following directions are suggested for the benefit of those who may forward material for examination.

All specimens should be accompanied by a brief note descriptive of the clinical condition and a special reference to the character of the examination desired.

Seventh Street Entrance.

The name and address of the person to whom the report is to be sent should be clearly indicated.

Sputum—should be sent in a clean, wide-mouthed bottle. The ordinary vaseline bottle answers all purposes. The morning sputum is preferable. That expectorated during meal time should not be included.

Blood For Widal Test. — After carefully washing, prick the lobule of the ear or the tip of the finger. The first drop of blood should be wiped away. Two large drops are then placed on a glass slide, one near either end, and allowed to dry without being spread out on the suface of the slide. After they have dried, the

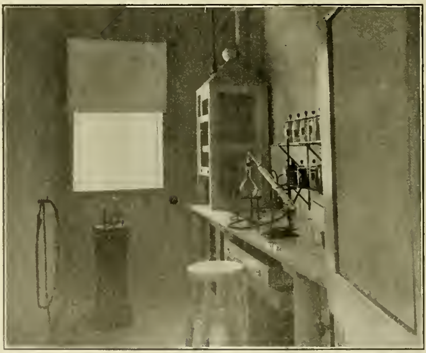
slide is carefully placed in a clean envelope and box, and then mailed to the laboratory.

Second Method.—Collect three or four drops of blood in a capillary tube; then seal tube over gas or other flame and send to the laboratory. (Capillary tubes will be sent upon application to the laboratory.) Blood for malarial parasites differential count. etc., should be sent to the labaratory on glass slides. As thin a smear as possible should be made.

Clinical Laboratory, Showing Arrangement of Desks, Miscroscopes, Microtomes, Incubator, Centrifuge, Etc

Smears For The Detection of Gonococci.—One drop ofpurulent discharge from the urethra should be placed at one end of a clean slide and a thin smear made overthe surface of the slide.

In collecting a specimenf rom a female patient,care should be taken to obtain the drop of material directly from the seat of the discharge. This should be done with a sterile swab or other instrument. Two smears should always be sent to the laboratory.



Clinical Laboratory, Showing Autoclave, Hood, Operating Tables, Etc.

Urine.—for bacteriological examination should always be catheterized directly into a bottle that has been rendered sterile by boiling 15-20 minutes. No chloroform or other preservative should be added. When sending a specimen of urine to the laboratory, always mark it with the date, the name of the patient and of the physician for identification, and specify whether a chemical or bacteriological examination, or whether Ehrlich's diazo test for typhoid fever is desired. The quantity should not be less than four ounces.

Pathological.—material from either operation or autopsy should be wrapped in gauze moistened with salt solution surrounded by oiledpaper or rubber protective. When it is not possible for material to reach the laboratory within twenty-four hours it should be placed in alcohol (80 per cent) or formalin solution (10 per cent.) Small fragments of tissue and thematerial from uterine curettage should be preserved always.

Tumors.—can be sent by mailing in wide mouthed specimen jars. They should rest upon a pad of absorbent cotton, which is placed in thebottom of the jar before

the tumoris dropped in.

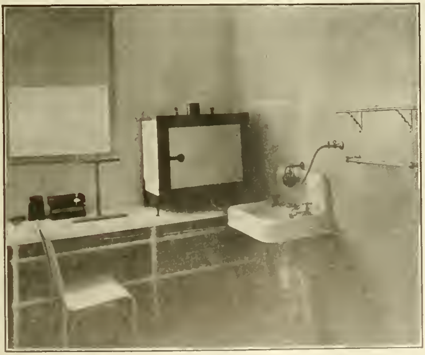
Feces.—should be sent in a clean, wide mouthed bottle. A large sterilized screw capped bottle will answer the purpose.

Wassermann's Test.—Since the advent of the discovery of 606 for the cure of Syphilis. the employment of the Wasserman test, both before and after its use, is conceded by all scientific investigators to be of the highest importance as a control to the curative effect of this remedy. The Charlotte Sanatorium Laboratory is specially equipped for carrying out this Wasserman Sero-diagnosis test for Syphilis.

(Clinical Laboratory, Showing Supplies, Working Table. Etc)

Specimens sent to the laboratory for this test should be obtained as follows.

1st. By using an ordinary antitoxin syringe, and withdrawing the blood directly from the median basilic vein, as represented in Fig. 1 illustrates tourinquet applied, taken the blood from the vein by means of the syringe



Clinical Laboratory, With Hot Air Sterilizer, Scales, Lavatory, Etc.

2nd. By means of capillary attraction, as illustrated in Fig. 11 represents empty capsule; tourinquet applied to finger. It is best to apply constriction to middle finger, and puncture the dorsal surface of the last joint of this finger rather close to nail with a sterile, and collect blood, as illustrated in Fig. 11.

After obtaining blood if capsule is used, as is shown in Fig. 11, simply place the curved end over a flame of a Bunsen Burner, alcohol lamp, or ordinary gas jet to seal same, and mail. If syringe or other means are employed, put blood in small test tude, allow to coagulate, cork, pack and mail as any other fraigle package. Atleast two C. C. should be withdrawn for this test. The syringe tubes, etc., should be clean and perfectly dry. It is the best, if possible, for patient to go to the laboratory and have the director of that department secure for himself the specimen of blood.

Milk.—The bacteriological examination of milk, requires certain precautions in the collection of the sample. Special instructions and proper containers will be sent upon application.

Stomach Contents.—should be sentin a sterilized bottle. Alarge vaseline or quinine bottle usually answers the purpose.

Fig I

Fig II.

The following table gives the cost of many of the examinations made in this laboratory:

Smears and Stains (tubercle bacillus,) gonococci, etc.	$1.00
Blood.	
Hemoglobin and Erythrocytes	1.50
Leucocytes	1.00
Differential	1.50
Malarial parasites	1.00
Complete analysis	3.00
Urine.	
Chemical	1.00
Microscopical	1.00
Complete analysis	1 50
Pathological Sections	5 00
Feces Examination	2 00
Blood Culture	5.00
Cultures and isolation of bacteria	5.00
Stomach Contents	2.00
Widal Test	2.50
Tissue Sections	5.00
Tuberculin Test	5.00
Wassermann's Test	10.00
Milk.	
Chemical	2.50
Bacterial	5:00
Water analysis, bacterial examination	5.00
Chemical examina ion including alkalimity, chlorides, ammonia, nitrites and nitrates	5.00
Quantitative analysis	$10.00 to 25.00
Culture Media (per tube)	.25
Sterilized tubes and pipettes	.15
Coagulation time	2.50
Vaccines	10.00
Sterilized Tubes with swab	.50
Bacterial Cultures	1.00
Sterilized solution	5.00
Spinal Puncture and Analysis	5.00

Address all specimen to the Charlotte Sanatorium Laboratory, Charlotte, N. C.

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PATHOLOGIST and BACTERIOLOGIST, Harvey P. Barret, M. D.

State Board Examination Questions of Maryland.

ANATOMY.

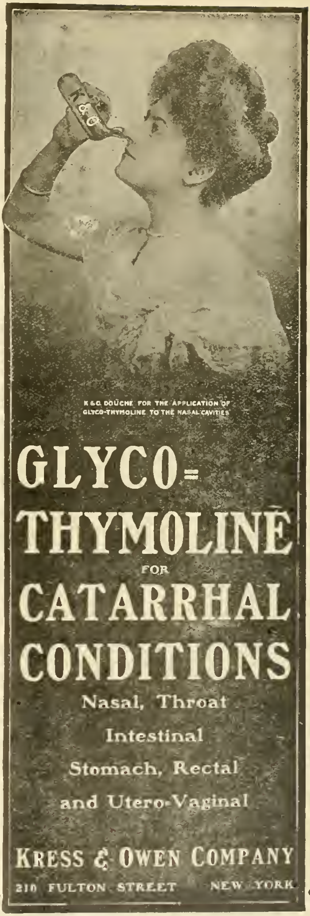
1. Describe the occipital bone.
2. Name the carpal bones.
3. Name varieties of articulations—give example of each.
4. Give origin and distribution of great sciatic nerve.
5. Give origin, insertion, and nerve supply of quadratus lumborum, brachialis anticus, orbicularis palpebrarum and sartorius.
6. Describe the epithelium of the pharynx.
7. What glands are in the small intestines and where located?
8. Describe a villus. What is its function?
9. What arteries form the circle of Willis?
10. What and where is the pituitary body?

PHYSIOLOGY.

1. What is meant by the physiological effect of a drug?
2. Into what general classes are foods divided? (b) Give examples of each.
3. What effect has starvation upon the proteins?
4. What is animal heat? (b) What relation exists between the temperature of the body and the pulse? (c) What is the difference between warm and cold blooded animals?
5. What is meant by nerve cells and nerve fibers? (b) Define afferent, efferent, trophic, inhibitory, motor, and vasomotor nerve fibers.
6. What is meant by diffusion and osmosis?
7. What is meant by absorption and nutrition?
8. Which organs of the body secrete and which excrete?
9. Describe the method of producing artificial respiration?
10. What is the composition of: Saliva, gastric juice, blood, and urine?

MATERIA MEDICA.

1. Iodine; how obtained. (b) The official preparations.
2. What is black wash? Yellow wash? (b) What are wines? (c) What is the difference in the preparation of lozenges, tablets, and triturates? Name some of the official longes.
3. What is the difference between anesthetics anodynes? Name some of each most generally used. (b) What is the difference between liniments and lotions? Name some of the official.
4. Give the average dose of tincture of aconite, tincture of nux vomica, tincture of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digitalis, tincture of opium, tincture of veratrum.

5. To what class of drugs does bismuth belong? What are the official preparations and doses?

6. What is the difference between irritants and counter-irritants? Name the most important.

7. Name six preparations of iron and their doses. (b) What are the incompatibles of iron? •

8. Write a prescription containing: Iron, arsenic, strychnine, and quinine, using the official terms and state when best administered.

9. Write a prescription containing: Tincture of aconite, sweet spirits of niter, spirit of Mindererus, using the official terms.

10. Silver: its official preparations and doses. What are the incompatibles of silver?

THERAPEUTICS.

1. Give therapeutics of hypodermoclysis and method of administration.

2. Write a prescription in Latin, without abbreviation, containing four ingredients which you would use for an acute bronchitis and give directions for using same.

3. Write a prescription in Latin, without abbreviation, containing three ingredients which you would use for diarrhea and give directions for using same.

4. Give the therapeutics of eserine and usual method of administration.

5. Give therapeutic uses of three zinc salts and name antidotes for zinc poisoning.

6. Name the official preparations of oxygen and give their therapeutic uses.

7. Give the therapeutics of three preparations of ammoninum and name them.

8. What is meant by a "gastric tonic" or "stomachic?" Give indications for use and mode of action.

9. Give the therapeutics of H_2O, hot and cold.

10. Give the physiological action and therapeutics of aconitum.

CHEMISTRY.

1. Define: (a) reagents; (b) valence; (c) crystalloid; (d) colloid; and (e) atom.

2. Give the chemical name and composition of "laughing gas," how it is obtained, and what are its properties?

3. Give one chemical antidote for each of the following: (a) antimony; (b) lead acetate; (c) cocaine; (d) morphine; and (e) phenol.

4. Describe in detail the examination of a sample of urine for the detections of bile, sugar, and albumin.

5. (a) What are metals? (b) What are nonmetals? (c) What are amalgams? and (d) What are indicators?

6. Give the chemical formula of each of the following: (a) Nitric acid; (b) boric acid; (c) sodium bromide; (d) zinc oxide; and (e) calomel.

7. What is glycerine? What is its source in nature? How is it obtained and what are its properties?

8. (a) What is an alcohol; (b) what is an alkaloid; (e) what is a salt; and (d) what is a hydrocarbon?

9. Give the "Law of constancy of composition."

10. Complete the following equation:
NH_3 plus HCl equals
MgO plus H_2SO_4 equals
$2KOH$ plus H_2SO_4 equals
$NaOH$ plus HCl equals
Na_3PO_4 plus $3AgNO_3$ equals

PATHOLOGY.

1. Ascaris lumbricoides; describe briefly life cycle and characteristics; mention two or more dangerous conditions brought about by infection with this parasite.

2. Mention at least four varieties of ulceration seen in the gastrointestinal wall. Describe the gross appearance of an amebic ulcer.

3. What are the dangers inherent to diseased tonsils?

4. What is meant by active congestion? Passive congestion? Give an example of each.

5. Trace the probable course of events which follow chronic obstruction of the urethra.

6. Given a slide supposed to be smeared with gonorrheel pus: How would you proceed to establish the fact?

7. On what principle does vaccination against typhoid fever depend? How is the vaccine prepared?

8. Describe the process of repair in an uninfected fracture of bone.

9. Describe the exudate in a pneumonic lung in the stage of red hepatization.

10. Define, explain, and give examples of exudate and transudate.

PRACTICE.

1. Define: (a) Von Graefe's sign, (b) uremia, (c) arteriosclerosis, (d) cirrhosis of the liver, (e) angina pectoris.

2. Define: (a) dysphagia, (b) hematuria, (c) hemoptysis, (d) laryngismus stridulus, (e) pertussis.

3. What diseases most commonly occur in the right inguinal region?

4. Differentiate neuritis and rheumatism.

5. Differentiate diphtheria and acute follicular tonsilitis.

6. Differentiate rubella, rubeola, and scar-

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7. Differentiate intestinal colic, uterine colic, and renal colic.
8. Give treatment of angina pectoris.
9. Give treatment of lobar pneumonia.
10. Give treatment of acute dysentery.

OBSTETRICS.

1. Name the sutures of the fetal head.
2. What precautions should be taken against septic infection during labor?
3. Indications for use of forceps and mode of application.
4. What are the objections to the use of ergot and stimulants in labor?
5. How would you prevent perineal tears during labor and delivery?
6. What are the varieties of placenta prævia?
7. Outline the care of the navel.
8. Describe some of the best substitutes for mother's milk.
9. What are the different forms of endometritis?
10. Mention the varieties of vaginitis and their treatment.

SURGERY.

1. Name the varieties of fracture of vault of cranium. Prognosis and treatment.
2. Name the different varieties of fractures, their etiology, symptoms, and complications.
3. Give a classification of dislocations with the etiology, predisposing cause, and anatomic peculiarity of each.
4. Give indications for operative treatment of fractures.
5. Give the early diagnosis of exophthalmic goiter.
6. Differentiate between obstruction of common and cystic ducts.
7. Describe glaucoma: Give signs and treatment.
8. Define hematoma, aneurysm, thrombus, and embolus.
9. Indications and contraindications for salvarsan in treatment of syphilis. Technique of your method of administration.
10. Causes and treatment of acute otalgia.

The Feeding of Babies with Undiluted Citrated Milk.

H. C. Mann (Guy's Hospital Gazette) gives an interesting account of his experience of the routine feeding of infants on citrated whole-milk, which he has practiced for the past three years. During this period some 400 cases requiring directions in feeding have passed through his hands, and in only half a dozen instances has he been obliged to adopt any modification of the whole-milk regime. Such an experience is a strong testimony to the value of this method of artificial feeding, a method which, owing to its simplicity and cleanliness, is conspicuously suited to hospital practice. Dr. Mann proceeds to give the weight records in eighty-nine cases, in each of which there had been loss of weight on other diets. Throughout his work the author has made use of sodium citrate in the proportion of one grain of the drug to each ounce of undiluted milk—half the dose, that is to say, that has been employed by most who have made use of citrated milk, whether whole or diluted, In stating that he knows of "no other published series of cases in which undiluted milk has been universally employed," the author has overlooked Dr. F. S. Langmead's paper in vol. iii of the Proc. Roy. Soc. Med. on "eighty consecutive cases of wasting infants fed on undiluted citrated milk" vide British Journal of Children's Diseases, 1910, vii, p. 219). Dr. Langmead, who, we believe, was the first to point out the value of citrated whole-milk in infant feeding, published his first paper in March, 1908.—British Journal of Children's Diseases.

What is one to do when he finds himself hopelessly out of rapport with the spirit of his times? The tide of professional thought and endeavor sets strongly in a direction of which he does not approve. Shall he allow himself to be swept into the current and be carried in the same general direction, seeking only to provide for his own interests and endeavoring to ride the waves instead of being submerged? Or shall be stand like a rock in the stream and deflect at least a portion into the better channel?

The trend of the medical movement is toward the specificity of disease, and to its treatment by means directed against each malady as a pathologic entity. The type of a remedy is antitoxin directed against diphtheria per se; applicable to every case, regardless of individual features, age, sex, race, symptoms, strength of patient, vehemence of attack, points of least resistance and greatest peril, environment, and accessory causes impelling toward malignancy and death.

The treatment? Over against the word "diphtheria" is set the other word, "antitoxin," and woe be to him who dares attempt to add aught thereto. Let his name be anathema. I have heard men in medical meetings demand that he who dares utter another word on treatment of diphtheria be refused a hearing! The truly scientific chap falls in line, and looks for therapeutic advance in serums, opsonins,

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salvarsans, and similar specifics.

I simply can and will not fall in line. It is of very little moment to the word or the profession that any one individual should stand aside from the crowd and be neglected. It means a very great deal to the world, and more to the medical profession than to any other, that the man in whose mind is implanted the conviction of a truth should adhere to it. The freedom of humanity today is built on sturdy old Luther's declaration; "Here I stand. God help me, I can not do otherwise!"

The way of progress for us does not lie in the development of specifics for disease, but in the study of physiology, the detection of aberrations from physiologic function and their correction. Earlier, still earlier, we must learn to detect the beginnings of disease and the causes at work

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to remove these and restore harmonious, equable activity to the organic functions. It is not the illustrious orator in the school, the skilled specialist, the daring wielder of bistoury and of scalpel, the accomlished manipulator of test tube and reagent, of microscope and stain. It is you. you. YOU, who must do this work, the Doctor, unlimited, the greatest of specialist, he whose specialty is the man himself, not any single organ or region or tissue or function.

The way to study and treat cases. is to individualize them, en bloc. The time to take cases is in the beginning, before irreparable damage has been done. The way to treat patients is to strike at the causes of disease, to remove these,the foundations, when the malady will fail of itself. This means individual study, early study, steady surveillance; and this again brings us to the noblest of our duties, the prevention of disease, and its arrest in its very incipiency.—Editorial, Courier-Record of Medicine.

obstetrical Problems.

Routh states that the mortality both in utero and soon after birth is still far larger than it should be. The accoucheur is responsible for the newborn child, during at all events the first fortnight of life, and in that period nearly one-third of those children who do not survive their first year lose their lives. Progress in the knowledge of the physiology of menstruation, labor, and lactation, and of the causation of the toxic diseases of pregnancy and the puerperium, will not be possible without the aid of the physiological chemist. Obstetricians are still ignorant of the biochemical changes in the blood which influence the cylical functions of menstruation and ovulation, or which have to do with the implantation of the fertilized ovum and the ouset of labor and lactation. Little is known also of the autotoxæmias lying at the basis of pernicious vomiting, puerperal albuminuria, eclampsia, chorea gravidarum, and puerperal insanity. The blood serum of pregnant women hinders the proteolytic ferments, as trypsin, while placental serum has a marked power in destroying cancer cells. Excess of lutein tissue is associated with hydatidiform degeneration of the chorion, while destruction of the lutein tissue prevents implantation of the ovum.—The London Lancet.

Salvarsan (606) Incorporated with Iodipin.

Iodipin is regarded by Schindler as the best vehicle for incorporating salvarsan ("606") for intramuscular injection. The salvarsan is rubbed up with 25 per cent. iodipin and sterilized anhydrous lanum, until a very smooth 40 per cent. ointment is obtained. This is filled in tubes and is warmed before use, so that it can be injected through a fine needle. A preparation four weeks old has not changed fn color, so that in all probability the suspension is permanent and not apt to undergo chemical change through oxidation, as with aqueous suspensions. The technique of injection is as follows: The skin is disinfected with tincture of iodine. The injection is usually made into the external third of a line joining the anterior superior spine with the tip of the sacrum. The oil is warmed and then injected, care being taken that no blood vessel is punctured with the needle. After injection the patient should rest for a few hours. Ayplications are as a rule not necessary, since the patients usually experience no pain. After use, the needles should be kept in paraffin.—Berl. klin. Woch.

Mortality in Various Trades.

From an exhaustive study of the mortality among bookbinding trades in Vienna Rosenfeld concludes that even apparently related trades may show quite dissimilar mortality figures, not only in relation to total death rate, but likewise in relation to the death rate for certain specific diseases. It is, therefore, inaccurate to gather many related trades together in studying mortality rates. These differences are due to very small differences in the circumstances and environment of the different artisans. In the study of mortality among trades as many subdivisions must therefore be made as possible, and detailed figures obtained. Moreover, increased mortality from some one disease must not be necessarily explained by the trade circumstances, but may be due to some quite extraneous and subtle factors. Moreover, only relative and not absolute figures give a correct conception of mortality, and therefore mortality figures in a trade in one town cannot be fairly compared with such figures in another town; other elements of population in the same town should be taken for comparison.—Wiener klin. Woch.

"We are too apt, I think, to regard diseases as entities—things that are definite, and, I had almost said, concrete, not, of course, as contrasted with abstracts, but rather as things with boundaries and circumscribed; whereas disease ought to be regarded as a particular condition of the individual, due to certain agents and modified by certain conditions. And as bearing on this view I would like to direct attention to the well-established fact that par-

"while professional endorsement of a remedy is a compliment to the honest effort of the manufacturer, it is reality an acknowledgment of its remedial value, the all-important factor in the treatment of disease.

The antiphlogistine possesses particular merit, as acknowledge by professional preferment, as the most sanitary, satisfactory and adaptable method of utilizing the therapeutic value of hot moist heat in the treatment of inflammatory diseases is convincingly indicated by its increasing demand.

The value of antiphlogistine applied thick and hot in inflammatory diseases of the throat, chest, joints and other deep-seated structures, is not a theoretical figment but clinical fact.

Heat relaxes the white fibrous tissues that constitute the chief elements of ligaments and tendons and in spasms and muscular contractions, an application of antihphlogistine will relieve the tension and pain and afford comfort to the patient."

ticular bacilli do not always cause the same symptoms. The pneumocòccus does not always cause croupous pneumonia, and we are all familiar with the protean characters of conditions due to the influenza bacillus and the Bacillus coli."—British Medical Journal.

Solitary Hepatic Abscess in Pregnancy.

Chavannaz and Loubet (Rev. de gynec. et de chir. abdom.) have studied a series of cases where a large and single abscess developed and set up symptoms during pregnancy. This condition simulates the big tropical abscess, and must not be confounded with the more frequent suppuration of the liver not unknown after puerperal infection, where numerous collections of pus are scattered over its substance. The solitary abscess, however, seems to be a very deadly complication—as bad, in fact, as disseminated suppuration. Five cases, including one under Chavannaz and Loubet's own observation, have been recorded with fairly complete details. Neither dysentery, typhoid, or appendicitis had troubled any of the patients. In none was there any evidence of injury. Careful observation seemed to prove that the abscess began to develop during pregnancy in all the collected cases. The infection, no doubt, arises in the intestine. In pregnancy and the puerperium the virulence of the Bacillus coli is greatly increased, hence the frequency of auto-infection. It is, therefore, rather remarkable that the complication in question is rare. The abscess is nearly always single. The amount of pus was considerable—at least half a pint—whilst in one case the liver was almost entirely converted into a vast abscess cavity. In three the pus was sterile, and in one only were microbes found in quantities. The Bacillus coli abounded, and there were staphylococci which seemingly played a secondary part in the infection. Local pain in the right hypochondrium or base of the right thorax is the chief symptom, and it is generally severe, but does not radiate to the shoulder. Dyspnœa and fits of coughing without hiccough seem frequent. In no instance was distinct jaundice reported. The prognosis is very bad. In the author's case the patient suffered from eclampsia and glycosuria, the abscess developing in the puerperium. It was incised, and fortunately there were free adhesions protecting the peritoneal cavity. Over three pints of pus came away. Seven months later the patient seemed well and had gained flesh. Free incision is the only treatment for large abscess of the liver in pregnancy.—British Medical Journal.

Prevalence of Syphilis.

By the courtesy of Dr. J. W. Barrett an advanced copy of the report, presented to the Victorian Government, of the result of a year's impersonal investigation of syphilis in the metropolitan district of Melbourne, has been placed at my disposal. The report states that Dr. B. B. Ham induced the government of Victoria to make provision for a collective investigation of the prevalence of the disease throughout the era in question by means of the Wassermann test. An advisory committee was formed, with Professor H. B. Allen as chairman, and Dr. Ham, Dr. Barrett, Dr. K. Miller, and Dr. A. Jeffreys Wood. Dr. Ernest Jones being subsequently invited to join the committee, and circulars were issued to all medical practitioners within the metropolitan district inviting them to forward samples of blood from every case diagnosed as syphilis or open to suspicion of syphilis. A schedule was given not only of ordinary syphilitic manifestations, but of diseases and occurrences in adults, children, and infants, in the sane and the insane, in connection with childbirth, etc., which, in the opinion of the committee, should cause the test to be applied. The reports were to be impersonal, and a fee was paid for each report. Dr. Hiller performed all the tests, with assistance in collateral work in the later stages by Dr. H. Douglas Stephens. The response from the profession was very large, 5,000 distinct cases being reported. In addition, Dr. Barrett during four months submitted to Dr. Hiller's testing every case attending his clinique at the Eye and Ear Hospital as in-patient or out-patient for any cause whatsoever. The main outcome of these investigations is as follows: Out of 5,000 cases reported (not including those of Dr. Barrett) 1,900 gave a positive reaction, and over 400 a partial reaction. Experience has shown that out of 100 cases of syphilis, only about 60 will give a positive reaction; so that 60 positives represent 100 cases of syphilis. Therefore, 1,900 positives represent 3,167 cases of syphilis, or 63.3 per cent. out of the 5,000 reported. On the metropolitan population of 600,000 this means that more than 0.5 per cent. were found to be syphilitic. The general figure for Melbourne is a multiple of the 0.5 per cent. found by Dr. Hiller, but exactness has not yet been attained. The gravity of the matter is beyond question, though there is no reason to suppose that Melbourne is in worse case than other large cities, and the advisory committee is convinced that the investigation must be continued. The collective investigation so conducted is the most extensive and important active research into the prevalence of syphilis that has yet been

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conducted in any part of the world.—The London Lancet.

Acute Nephritis Following the Injection of Salvarsan.

The untoward events which may follow the administration of salvarsan are almost exclusively associated with the intravenous mode of injection, and it is also possible to argue that many of them (nerve-deafness, for instance) are as likely to be due to the disease as to the drug. However, when all such allowances have been made, there still remains a residue of evidence as to the possible toxicity of salvarsan. Two cases, reported by Dr. H. Tucker, of Philadelphia, in the Therapeutic Gazette for September, go to show that the intravenous injection of salvarsan may speedily be followed by acute nephritis. The first case was that of a man, aged 30, who came under treatment for a hard penile sore with inguinal adenitis. His general condition was good, and his life had been one of uninterrupted health until he acquired syphilis. A week before the injection of "606" was given he presented a characteristic secondary rash. The urine is reported on this same date as containing a trace of albumin and a few leucocytes, but no casts. The Wassermann test was positive. A dose of 0.6 gramme of salvarsan was given intravenously. In an hour the patient was vomiting and the temperature had risen to 101.2° F.; there was a large watery evacuation of the bowels. On the following day there was complete suppression of urine, none being withdrawn even by catheterization; by the evening the patient was very dyspnœic, and by midnight he was dead. No post-mortem examination was made. The second patient was also a fairly healthy man, aged 24; he was poorly developed and took spirits to excess at times, but apart from these facts his condition was apparently normal, except for the evidence of syphilis, which brought him under Dr. Tucker's care. He was in the secondary stage, having already undergone an inadequate course of treatment several months before. The urine was normal, containing neither albumin nor casts. Accordingly, after the Wassermann test had shown a positive result, 0.6 gramme of salvarsan was given by intravenous injection. Two hours later excessive vomiting began, with copious watery motions; the temperature was 105°, but this fell in 18 hours to 96°. No urine was passed, in spite of active treatment, for 24 hours following the injection. The mental processes were clouded and there was fleeting delirium. A specimen of urine collected by catheterization on the day following the injection presented all the features of acute nephritis: blood and casts were found, and the specific gravity was 1030. Within a week, however, all the abnormal constituents had disappeared together with the symptoms. It seems impossible to escape the conclusion, particularly in regard to the second case, that salvarsan administered intravenously can provoke acute inflammation of preuiously healthy kidneys.—The London Lancet.

Fatal Case Following Injection of "606."

Mr. H. Moore reported a case of early General Paralysis of the Insane treated by "606," with a fatal result. The patient, aged 25, was given 0.5 gramme intravenously. A severe reaction followed, his temperature rising to 103° F. It was normal next morning, and he left the hospital on the fifth day. Wassermann's reaction, which had been negative before injection, was positive four days after. Six weeks later, his general condition being much improved, but Wassermann's reaction being still positive, he was again given 0.5 gramme. The reaction was very severe, his temperature rising to 105°, with much diarrhoea, vomiting, and general pain. The reflexes, which were all exaggerated before injection, disappeared. He was much better the following morning, but that afternoon he had a second rigor, with rise of temperature to 102°. His general condition became rapidly worse—he got ptosis of the left eyelid, bilateral paresis of the limbs, and difficulty of articulation, and died that night.—Royal Acad. Med. Ireland Lancet.

Lumbar Puncture in Typhoid Fever.

In a case of typhoid fever accompanied with intense and persistent headache, the authors practiced lumbar puncture. The first puncture confirmed the diagnosis of meningeal hypertension, but had no effect on the headache. A second, however, besides showing the presence of persisting, though lessened, hypertension, brought immediate and lasting relief. The authors are of the opinion that meningeal hypertension may be present in various acute infections without producing a definite group of symptoms pointing to the meninges, and urge, in view of the readiness with which lumbar puncture is now performed after a little practice, and its harmlessness, that this measure be availed of in infections when there are present evidences of meningeal hypertension, particularly violent and persisting headache, even when they occur as isolated symptoms, as in the case reported. —Oddo and Monges, Marseille medical; Bulletin medical.

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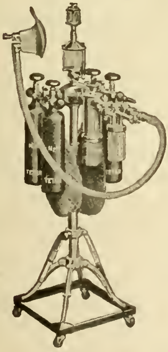

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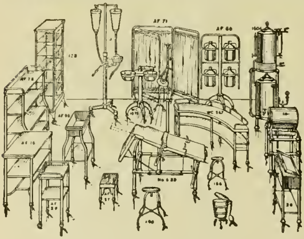

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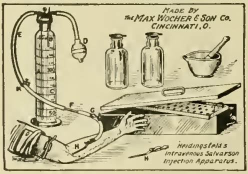

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SPECIAL WESTERN NUMBERS

In furthering the plan of producing special issues of the **American Journal of Surgery** composed of contributions by surgeons residing within a certain geographical area, yet of international reputation there will be issued in the early part of 1912 a **Special Western Number** of this magazine.

Subjects and those to contribute:

The Operation of Gastroenterostomy, by William J. Mayo, Rochester, Minn.

The Surgery of Tendons, by John B. Murphy, Chicago, Ill.

Operative Treatment for Graves Disease, by George W. Crile, Cleveland, Ohio.

Colonic Intoxication, by J. E. Binney, Kansas City, Mo.

Practical Points in the Surgical Treatment of Exopthalmic Goitre, by A. J. Ochsner, Chicago, Ill.

Treatment of Foreign Bodies in the Esophagus, by E. Fletcher Ingals, Chicago, Ill.

Brain Surgery Technique, by J. Rilus Eastman, Indianapolis, Ind.

Treatment of Abscesses and of the Necrotic Foci Resulting from the Use of Salvarsan, by A. Ravolgi, Cincinnati, Ohio.

Treatment of Prostatic Obstruction, by E. O. Smith, Cincinnati, Ohio.

Subject not Announced, by H. Tuholske, St. Louis, Mo.

Artificial Tendons and Ligaments in the Surgical Treatment of Paralysis, by Nathaniel Allison, St. Louis, Mo.

Uterine Cancer, by John C. Murphy, St. Louis, Mo.

Arthritis Derformans, Leonard W. Ely, Denver, Colo.

Acute Angulation and Flexure of the Sigmoid as a Causative Factor in Epilepsy with special Reference to Treatment, by W. H. Axtell, Bellingham, Wash.

The character of contributions prepared by these well known surgeons are of such a nature as to make this number particularly interesting.

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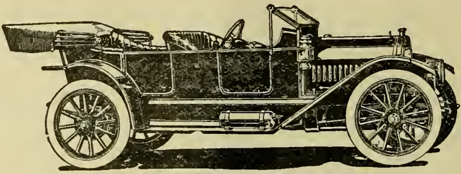

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Treas. S. C. Stanton, M. D., Chicago. Ill.
Next Meeting Detroit, Mich., Sept, 13th-14-15, 1910.

SOUTHERN SURGICAL and GYNECOLOGICAL ASSOCIATION.

Annual Meeting at Washington, D. C., Dec, 19-21, 1911.
W. D. Haggard. M. D., Sec., Nasheville, Tenn.
Rudolph Matas, Prest. New Orleans, La.

SOUTHERN MEDICAL ASSOCIATION.

Annual meeting atHattiesburg, Miss. Nov .14-15 -16, 1911.
Oscar Dowling, M. D., Sec. Shreveport, La.
Isadore Dyer, M. D., Pres.
New Orleans, La.

TRI-STATE MEDICAL ASSOCIATION OF THE CAROLINAS AND VIRGINIA.

Annual Meeting at Norfolk, Va., Feb. 23-24, 1912.
Ralfe E. Hughes, M. D., Sec.,
Laurens, S. C.
A. E. Baker, M, D., Pres.
Charleston, S. C.

MEDICAL ASSOCIATION OF THE STATE OF ALABAMA.

Annual meeting at Birmingham, Ala., April,19 1912. J. N. Baker, M. D., Sec., 602 S. Perry St., Montgomery, Ala.
L. C. Morris , M. D., Pres.
Birmingham, Ala.

MEDICAL ASSOCIATION OF THE SOUTHWEST.

Annual Meeting at Oklahoma City, Okla. October, 1911.
F. H. Clark, M. D., Sec., El Reno, Texas.
M. L. Perry, M. D. Prest., Parsons, Kans.

FLORIDA MEDICAL ASSOCIATION.

Annual Meeting at Tampa, Fla.
May, 8-9-10, 1912.
J. D. Fernandez, M.D., Sec.,
Jacksonville, Fla.
A. H. Freeman, M. D., Pres.
Starke, Fla.

MEDICAL ASSOCIATION OF GEORGIA.

Annual Meeting at Augusta Ga., April, 17-18-19 1912.
W. C. Lyle, M. D., Sec. Augusta, Ga.
W. L. Felts, M. D., Pres.,
Corrollton, Ga.

KENTUCKY STATE MEDICAL ASSOCIATION

Annual Meeting at Louisville, Ky.
1912. (Date not decided)
Arthur T. McCormack, M. D., Sec.,
Bowling Green, Ky.
Jas. G. Carpenter, M. D. Prest., Stanford, Ky.

LOUISIANA STATE MEDICAL SOCIETY.

Annual Meeting at New Orleans, La.
April, 23-25, 1912.
Joseph D. Martin, M. D., Sec.,
141 Elk Place, New Orleans, La.
R. O. Simmons, M. D. Pres.
Alexandria, La.

MISSISSIPPI STATE MEDICAL ASSOCIATION.

Annual Meeting at Jackson, Miss, April 11, 1912.
E. F. Howard, M. D., Sec.,
Vicksburg, Miss.
D. J. Williams, M. D., Pres.,
Ellisville, Miss.

MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA.

Next Annual Meeting at Hendersonville, N. C. June, 18, 1912.
A. A. Kent, M. D., Pres.
Lenoir, N. C,
D. A. Stanton, M. D., Sec.,
High Point, N. C.

NEW MEXICO MEDICAL SOCIETY.

Annual Meeting at Roswell, N. M.
(Date not yet decided). 1921.
Dr. R. E. McBride, M. D. Las Cruces N.M. Secretary.
R. L. Bradley, M. D. Pres, Roswell, N. M

SOUTH CAROLINA MEDICAL ASSOCIATION.

Annual meeting at Columbia, S. C., April 20, 1912.
Edward A. Hines, M. D., Sec.,
Seneca, S. C.
J. W. Jervey, M. D., Pres.
Greenville, S. C.

TENNESSEE STATE MEDICAL ASSOCIATION.

Annual Meeting at Chattanooga, Tenn.
April, 9, 1912.
Perry Bromberg, M. D., Sec.,
Nashville, Tenn.
C. J. Broyles, M. D., Pres.
Johnson, City, Tenn.

MEDICAL SOCIETY OF VIRGINIA

Annual Meeting at Norfolk, Ky.
Oct. 22-25, 1912.
P. A. Irving, M. D., Sec.,
Farmville, Va.
Hugh M. Taylor, M. D., Pres.
Richmond, Va.

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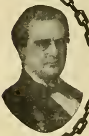

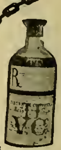

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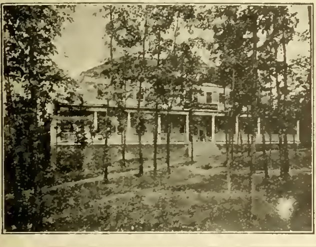

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5th " Dr. W. P. Holt, Duke.
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8th " Dr. R. O. Dees, Greensboro.
9th " Dr. A. A. Kent, Lenoir.
0th " Dr. M. L. Stevens, Asheville.

H. D. Walker, M. D. Treasurer. Elizabeth City.
Orator--Dr. John H. Tucker,. Charlotte
Essayists—Dr. R. N. Duffey, Newberne
Leader of Debate—Dr. M. E. Street Glendon

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Committee on Scientific Work: Drs. L. B. Newell Charlotte. J. J. Phillips, Tarboro., J. S. Harrison Elm City.

Committee on Finance: Drs. H. D. Stewart, Monroe. H. M. S. Cason, Edenton; C. O. Abernathy Raleigh.

Committee on Obituaries: Drs. A. W. Knox Raleigh E. G, Moore, Elm City. M. L. Stearns, Asheville.

HOUSE OF DELEGATES, A. M. A.: Dr. J. Howell Way, Waynesville; Alternate, Dr. P. J. Thomas, Wilmington; Dr. A. J. Crowell, Charlotte; Alternate, Dr. D. S. George, Bayboro; Dr. T. E. W. Brown, Asheville; Alternate, Dr, J. V McGougan, Fayetteville.

Medical Society of the State of North Carolina meets in Hendersonville, June, 1912.

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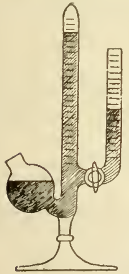

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The Charlotte Medical Journal

VOL. LXV CHARLOTTE, N. C., JUNE, 1912. No. 6.

The Medical and Surgical Treatment of Gall Stones.*

By Joseph Graham, M.D., Durham, N. C., Surgeon to Watts Hospital.

Medical Treatment.—Many sufferers from gall stone disease show marked contraindications to surgical intervention. Persons who are very old, markedly anemic or cholemic, or who have some grave lesion of heart, lungs or kidneys, should be operated only as a last resort, if at all. Such cases as these should be given medical treatment. The sole purpose of medical treatment is to reduce the inflammation of the gastrointestinal tract The cure of gall stones or their complications by drugs is an impossibility. Gall stones cannot be dissolved or removed by medicine. The complications, such as empyema of the gall bladder, adhesions, fistulæ and cirrhosis of the pancreas, are never cured by medical treatment. Much can be done by medical means to build up the patient and reduce the effects of cholemia and prevent recurrence of attacks of colic.

Surgical Treatment.—It is held by many authorities that it is not wise to resort to radical measures for the removal of gall stones so long as they do not give rise to any grave disturbances. This would be a proper and reasonable view to take were the danger to the patient the salme before and after development of these complications. This, however, is not the case. Experience has shown that there is practically no mortality in cases operated before the development of complications, while the deaths following operations might have been avoided had the operation been performed before these complications arose. "It was the mortality and complications of delay that placed the early operation for appendicitis on sound surgical footing. To remove the disease while still in the appendix was the logical conclusion." The same reason applies, and with equal force, to the early operation for gall stones. Remove the disease while still in the gall bladder, and avoid morbidity and mortality. Early operation is an attractive proposition, and offers certain definite advantages, increased safety for the patient, avoidance of complications, avoidance of serious illness, and ease of performance. Delay produces the complications, complications produce the difficulties, dangers and mortality. Surgeons are certainly justified in telling patients with gall stones that by operation they can be quickly and safely cured of their trouble, and be saved from long suffering and eventual danger. But the surgeon must look upon the prognosis from the patient's point of view, and must thoroughly consider all of the difficulties and dangers of surgical treatment.

It is usually unwise to operate during the development of an acute attack of inflammation of the biliary tract. These cases fare better if tided over the acute exacerbation, unless there is a localized collection of pus. For the acute exacerbation, Oschner directs rest—absolute rest of the body in general and of the alimentary tract in particular, avoidance of food and cathartics, lavage and rectal feeding. By these measures acute cases can be frequently tided over to a safe time for operation. The choice of operation will be determined in part by the local condition found when the abdomen is opened, but more often by the general condition of the patient and the skill and experience of the operator. In many cases, especially in old persons suffering from a severe infection, the operation which gives the speediest relief will be the most desirable. It is not the permanent cure of the disease at such a moment that is the surgeon's chief desire, but some safe means of giving relief to urgent threatening symptoms so the patient may be carried through a time of great peril; and later a more complete procedure for permanent relief can be undertaken. The chief dangers of operation are dissecting errors, wounding of important structures, and post-operative hemorrhage. Jaundice is the most frequent cause of post-operative hemorrhage. This is what makes the common duct operation more dangerous than cholecystotomy and even cholecystectomy. Every bleeding point must be carefully ligated. This is the best safe-guard against hemorrhage. Sepsis and peritonitis are best guarded by careful protection of the exposed surfaces, aspiration of the infected bile and proper arrangement of abundant drainage. The chief difficulty of operations are adhesions and the certain removal of all stones. In dealing with adhesions, nothing is of as much value as experience. Considerable time and skill are frequently required to clear away the fog so that we can see the disease. The greatest difficulty is to be certain that all stones have been removed. While stones may be found by one or two fingers, such palpatation is always uncertain; even with the whole hand introduced into the abdominal cavity it is easy to overlook a stone. It is almost impossible to feel stones in a tense, distended gall bladder. In palpatating the cystic and common ducts for stones, much confusion is caused by the presence of enlarged lymphatic glands along the course of the ducts. Stones are more frequently overlooked in the hepatic and common ducts than in any other location. The best safe-guards against overlooking stones are incision of sufficient length to admit the whole hand in the abdomen, rotation of the liver, careful, repeated systematic palpatation, instrumental examination, and, if the history locates the stone in the duct, incision of the duct and digital exploration with the uncovered index finger. If the duct is occluded by stone, it will be sufficiently dilated to admit the finger. Stones frequently will be detected by the internal digital exploration of the ducts when external palpatation and instrumental examination have failed. The importance of the overlooked stone cannot be exaggerated. The overlooked stones produce renewal of symptoms and suffering, and the patient has to undergo a second operation and again be exposed to the dangers of anæsthesia, shock, hemorrhage and sepsis.

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*Read before the South Carolina State Medical Society, Columbia, S. C., April, 1912.

This is a brief outline of some of the difficulties and dangers. Only those who do these operations can appreciate them. No branch of surgery is less suitable for the beginner. Complications may develop which tax the skill of any surgeon. The after treatment should always be in the charge of the surgeon. The after treatment is usually simple and easy; the patient is left alone and recovers. Occasionally complications develop which, in their successful management, require all the skill and experience of the surgeon. The management of the drainage is important. Drainage should be left in until it has fulfilled its purpose and can be easily removed. The most frequent post-operative symptom is persistent vomiting. Early and repeated lavage is the only satisfactory treatment, and practically never fails to give relief.

The results of the surgical treatment of gall stone are universally acknowledged to be highly satisfactory. In no other branch of abdominal surgery is a final and permanent cure more certain to follow operation. Much would be gained if these cases came to the surgeon earlier, when they had gall stones alone and not complications.

Medicine and surgery must go hand in hand, each treating a separate class of patients, and always realizing that a surgical cure is the only final and definite one.

Early Diagnosis of Diseases of the Upper Abdominal Region.*

By C. D. Hill, A.B., M.D., Durham, N. C., Former Surgeon to St Francis Hospital, Jersey City.

No attempt will be made to differentiate all the diseases referable to the upper abdominal region, but I shall confine myself to those diseases which are now classed as surgical. Even with these restrictions I can make only general statements in this plea to show the necessity of a differential diagnosis and the importance of early surgical interference.

Within the past ten years, Mayo, Murphy, Deaver, Finney, Moyihan, Mikulicz, Rodman, Robson, Roux, Kocher, Kronlein, and many others, by exploring this region, have not only verified many of the theories of the internists, but have worked out new problems in pathology, diagnosis, prognosis and treatment. In diagnosis they have substituted direct examination by sight and touch, for indirect inferences from uncertain symptoms. In treatment the procrastination of a conservative inactivity has given way to timely and rational surgical procedures.

These leaders and their followers are waging the same battles, gaining the same victories, overcoming the same opponents, as the abdominal surgeons have been doing for fifteen years in the right iliac region.

Before the surgeon invaded this region and claimed certain lesions as his own, the diagnosis of its disease offered insurmountable difficulties to the physician. While the internist was hesitating and waiting to verify his diagnosis, the disease was advancing, or the patient had already met with some disaster.

This group of organs includes the pylorus, gall bladder and ducts, pancreas, and transverse colon, all of which lie below the right lobe of the liver and are situated very close anatomically to each other, or as Mayo says, "the palm of a hand may cover a serious lesion of any one of these organs."

When any organ in this group is diseased it causes a disturbance in function of one or more of the other organs, and often changes their relative position; therefore there is still greater confusion as to the true seat of the disease, especially when only indirect methods of investigation are applied. In disease these organs are so closely related and so intimately associated, it is often difficult properly to refer the very valuable symptom of pain, or tenderness and resistance, or even a tumor.

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*Read before District Medical Society, Durham, N. C., April 26th, 1912.

In this region the stomach may be looked upon as the organ of most interest, because it is the one most apt to give prominent symptoms, not only when it is diseased itself, but, very frequently, when a disease arises in one of the other organs it affects the stomach, both directly and indirectly. As in health the pyloric portion is the most important factor in the muscular function of the stomach, so in disease it is the principal part to be studied. In the majority of cases the pyloric end is the site of ulcer and cancer and their complications, and in gall stone disease adhesions here produce their worst effects.

It is no wonder that patients suffering from surgical lesions are treated for "indigestion," "stomach troubles," "liver troubles," "biliousness," etc., and plied with a new favorite formula every time a different physician is consulted. In many of these cases if we would recognize the true value of symptoms, and endeavor to differentiate actual conditions, we should get better results. Oftentimes in these cases if we realized that an accurate diagnosis was not possible, but we were assured that there were sufficient pathological changes taking place in the patient's abdomen to justify an exploratory laparotomy, we could not only clear up the diagnosis, but we would be taking the preliminary step in relieving some mechanical condition or removing a new growth.

Gall Stones.—Ordinarily, we would not expect it to be a difficult matter to make a diagnosis of cholelithiasis, if we bear in mind that symptoms, referable to the stomach, may be caused by disease in the bile passages, and if we make a thorough examination of the case, and get a history of cramps, coming on suddenly and disappearing suddenly, with tenderness at the Mayo-Robson point. In a thin subject we may confuse a movable distended gall bladder with a floating kidney, but if we persist in our examination we ought to differentiate the two conditions. I recall a case of gall stones in which the most prominent symptoms were fever and chills every second day. Deep pressure over the region of the gall bladder soon convinced the examiner, as well as the patient, that the seat of the trouble was there. It is not a mere fancy when I say that many cases of cholelithiasis have been treated for malaria. Dr. Wm. Allen, of Charlotte, in the Transactions of the Medical Society of the State of North Carolina for 1910, says: "From a careful microscopical examination of about one hundred and thirty blood slides during the past eighteen months, I have found that in only about five per cent. of the cases clinically diagnosed malaria can the malarial organism be demonstrated. That soul-satisfying diagnosis, "billiousness and a touch of malaria," is a curse to the profession and laity alike." We need not wait for jaundice to appear before making our diagnosis, for this only happens when there is some obstruction in the common or hepatic ducts. Often in operations for cholelithiasis we find the contiguous organs bound together by firm adhesions, and when this is the case it is well to extend the investigation further, for there may be other diseased conditions, such as an ulcer of the stomach, or a pancreatitis, or the perigastritis itself may cause trouble, as we shall see further on.

With the present perfection in the technic of operations for pathological changes so frequent in the gall bladder and ducts, and with such a low mortality, we think it very essential to make an early diagnosis, and treat these cases surgically. By early diagnosis and operative procedures we will relieve much present suffering and prevent many annoying complications and sequelæ. The literature of this subject is replete in almost every detail, and, judging from the number of operations performed in the past ten years, it would seem as if these cases had been transferred from the internist to the surgeon.

Ulcer of the Stomach.—What will be said in regard to ulcer of the stomach will apply in the main to duodenal ulcer, for, as Osler says, in the great majority of cases they cannot be separated; and, besides, on opening the abdomen we find them often associated. By means of the surgeon's explorations it has been found that ulcer of the stomach is far more common than was formerly supposed. In ulcer of the stomach we should expect to find a history of hematemesis, or bloody stools, pain after eating, local tenderness, gas exuctations, and increased free hydrochloric acid. In 50 per cent. of the cases we do not get hemorrhages, while in other diseases, as alcoholic gastritis and passive congestions in the portal system, the hemorrhages may be very profuse. A physician seeing his first case of hematemesis from alcoholic gastritis, or beginning cirrhosis of the liver, will be as much alarmed as his patient. He will give a very grave prognosis too. But after his second or third case, he will not be alarmed even if the blood is emitted in bucketfuls. Pain may vary as to time, or be entirely absent, and is frequently symptomatic of other diseases. Hyperchlorhydria is the rule, and consequently of great value in diagnosis, but there may be no increased acidity in ulcer, and besides we sometimes get an increase in cholelithiasis, and other conditions. If we get the combination of symptoms, mentioned above, in a young woman, we can make our diagnosis without an exploration, especially as we do not have to resort to surgery so often for their relief. Over 50 per cent. of these cases will heal under the proper diet, rest in bed four to six weeks, alkalies and large doses of bismuth or some other powder to protect the ulcer. In the case of older subjects, especially if males, which give a clear history of ulcer, we shall not get such results by this treatment. It has been estimated by Rodman, Robson and Moynihan, and others, that over 25 per cent. of patients having ulcer will die from perforation, hemorrhage or anemia; over five per cent. of them will develop cancer on the site of ulcer; many of them will contract pulmonary tuberculosis; while a great number of them will continue to be chronic sufferers from complications, such as perigastritis, obstruction of the pylorus and dilation of the stomach. We do not get any such percentage of mortality from the present operative procedures, and furthermore, an untold amount of suffering is prevented or relieved.

One would think that such a definite lesion as ulcer would give uniform symptoms, but here, as in many other diseases, the exceptional outnumber the typical cases. Of two ulcers exactly alike in size, situation and duration, one will give the characteristic and pathognomonic signs; the second will lie dormant for years, or at least with no symptoms to enlighten the physician or warn the patient. Again, in the same patient, the symptoms vary at different periods. At one time the ulcer causes the most distressing disturbances, such as intense pain, alarming hemorrhages, and the most pernicious anemia; at another time the disease is entirely latent, and the attendant and the patient may be soothed in the hope that it has healed. The differential diagnosis is at times impossible, unless we do an exploration. Surgeons of the greatest experience say it is often impossible to differentiate ulcer from cancer; and sometimes, as Sippey says, cholelithiasis may give all the symptoms of ulcer and vice versa.

Perigastritis.—In operating in this region we often find numerous and dense adhesions binding together two or more organs and often interfering with their functions. In such cases they constitute a perigastritis, and whereas a very common complication in ulcer, we may have them in cancer, in gall stone disease, and in fact when any of this group is affected. A perigastritis really shows the efforts of nature to limit the diseased process; if an ulcer to put the stomach at rest, and to prevent perforation. But while the adhesions in the beginning are protective, they may be complications themselves, and cause symptoms by interfering with the mobility of the stomach; or they may cause an obstruction in the neighboring gut. According to their location they may cause pain in certain movements, as leaning forward or backward, or kneeling. After opening the abdomen and separating such dense adhesions binding together the organs in this group, one is impressed with their intimate relations and interdependence. Furthermore, we realize that only mechanical means will relieve such conditions.

Perforations.—Before leaving the subject of ulcer it is well to bear in mind one of its distressing sequelæ, and that is perforation, for in the acute cases it is very imperative to make an early diagnosis and still more imperative to open the abdomen and repair the perforation

While in the great majority of cases you will get a history of ulcer before the perforation occurs, you may, as in the last case of perforation which happened in my practice, get no such history. This case showed all the symptoms of acute perforation. He was taken suddenly ill, and when I saw him fifteen hours after the beginning of his illness he had an agonizing expression on his face, was suffering from great pain, there was marked tenderness over the epigastrium, severe hematemesis, thready pulse, rise of temperature, tympanites and other signs of beginning peritonitis. As in this case, such acute perforations are generally in the anterior wall. An acute perforation may not show this pathognomonic syndrome, but it may simulate intestinal obstruction, acute appendicitis (when the appendix lies high up under the liver) or acute hemorrhagic pancreatitis. If the peforation occurs in the posterior wall of the stomach or in the duodenum, it may be so well protected by adhesions its course may be sub-acute or chronic. According to the direction which the pus takes it may simulate a subphrenic abscess, an empyema, an appendicular abscess, or an abscess in other parts of the peritoneum.

Cancer of the Stomach.—While the internists have cleared up many of the problems in the diagnosis of this alarmingly frequent disease there are still many cases presenting an endless amount of difficulties. Many investigators now claim that it is often impossible to make a diagnosis of carcinoma of the stomach without an exploration, or at any rate in time to offer any prospect of relief. As you recall, the prominent symptoms of cancer are pain (especially when the stomach is empty), "coffee grounds" vomit, absence of hydrochloric acid, cachexia, and tumor, in a patient beyond middle life. If you waited for this list of diagnostic symptoms to appear, the probabilities are that you would lose the golden opportunity of staying the progress of the disease. As referred to under ulcer, it is often impossible to distinguish the two diseases, and I doubt if in some cases the parallel columns, we so often see in text-books, would help us to solve the puzzle. While pain and hemorrhage are symptoms in both diseases, they vary very much, and may be absent in either case. While it is suggestive of cancer if you can palpate a tumor, yet you may detect a tumor in ulcer with perigastritis. Even after opening the abdomen and finding a tumor with enlarged glands, mistakes have been made, a gastroenterostomy having been performed as a palliative measure, on the supposition that the mass felt was cancerous, and yet the sequel showed that the growth was not malignant. In a study of 216 cases of gastric cancer Mayo (Surgery, Gynecology, Obstetrics, February, 1912) shows that one half had their origin in chronic gastric ulcer. It is very likely that these cases could have been diagnosed and cured before they became cancerous. Absence of hydrochloric acid is a valuable symptom, yet if we wait for this symptom, there is little prospect of eradicating the disease, so far has it advanced. Mayo and others lay great stress on the importance of opening the abdomen in cases of suspected cancer, for only by early surgical interference could they get such results as they do. In many of the cases coming to us, the disease is too extensive to be eradicated, while others are too weak to withstand any operation. Though there are many workers in the field, there is much to be desired in the early diagnosis and treatment of cancer of the stomach.

Diseases of the Pancreas.—The diagnosis of the diseases of this organ can be, as a rule, only made by resort to surgery, for the pancreas lies at the very bottom of this valley of quondam speculation, guesswork and mysticism. By bearing in mind that this organ may become diseased, it will put us on our guard, when a case presents itself giving symptoms in the upper abdomen. In recent years a great many operations have been done for pancreatic disease. Opie was the pioneer in its pathology, while Robson says the keynote in its treatment is drainage, usually by a cholecystotomy. In about half of the cases found, chronic pancreatitis was a complication of gall stones, hence, it is well to bear this in mind when operating for gall stones. Deaver has operated for acute pancreatitis twenty-two times, and one hundred and thirty times for chronic pancreatitis (N. Y. Med. Jour., March 23, 1912), hence, it must have been frequently overlooked by surgeons of less experience. He divided pancreatitis into the acute and chronic forms, and says, that while a diagnosis may be attempted, in the greater number of cases, a positive diagnosis can only be made by opening the abdomen. Some of the diseases which pancreatitis may simulate have already been mentioned.

The limits of this paper will not permit me to dwell on the many acute surgical conditions arising in the upper abdominal region, which require early diagnosis and surgical treatment. Indeed, I do not think there is such necessity for taking up your time, for I believe the majority of practitioners today have abandoned the "do nothing policy" of calling severe traumatisms of the abdomen "internal injuries," and waiting for developments; and designating as "peritonitis" all acute conditions with fever, irrespective of the cause.

It is asking too much of nature to expect her, in the one case, to unite a rupture, caused by some explosion from without; in the other case to close a perforation due to some accident from within.

If we realize that a disaster has occurred within the patient's abdomen, even if we have not arrived at an exact diagnosis, we cannot better assist nature than by exploring and making an effort to relieve. Delays of minutes and hours in the acute cases are worse than hesitating for days and weeks in the chronic cases.

As to the latter class of cases, of which this paper has taken a cursory survey, I trust I have not conveyed the idea that all cases showing digestive disturbances, or other symptoms referable to this region, are surgical; nor that all, nor even a large part of, the surgical cases will require exploration for the purpose, alone, of making a diagnosis. The majority of cases consulting us for symptoms referred to this region will still be non-surgical, and will be relieved by removing the causes, regulating the diet, advising rational measures of living, and prescribing the proper remedies.

In far the greater number of surgical cases, we ought to be able to make a diagnosis by thorough investigations, along the usual lines. But if we find by our diagnosis surgical measures are indicated, we should not hesitate to offer them; for many pathological conditions can be remedied that seemed utterly hopeless only a few years ago. I believe a much earlier diagnosis can be made than formerly, if we realize the necessity for it, and if we use all the means already at our command. This consists of taking thorough and systematic histories, noting all the subjective symptoms, making repeated and painstaking physical examinations, and making chemical and physical examinations of the stomach contents. Recently, much aid has been given in the diagnosis of diseases of the upper abdomen by taking roentgenographs after giving large doses of bismuth. If, after exhausting all these methods, and weighing all the facts, we are still undecided as to our diagnosis, we are doing our patients and ourselves an injustice by persisting in this policy of waiting for more diagnostic symptoms to appear. In such cases a surgical lesion is often the basis for the morbid phenomena; a diagnosis should be made by surgical methods, and surgical relief attempted.

Conservation of Child Life.*

By A. A. Kent, M.D., Lenoir, N. C., President State Medical Society.

We are emerging from an age of universal and prodigal waste into an era of conservation and constructive development. If I were called upon to contrast the last quarter of the 19th century with the first quarter of the 20th century, and in a word to say what thing in the most signal way characterized each, I would say of the former period, waste, universal waste, and of the latter period, conservation, conservation in everything. The word conservation, as now applied, is not confined solely to the saving of material things or forces, as it might seem to mean, but has a much broader significance. It comprehends, for illustration, not merely the saving of our lands and water power, but their development, and the putting of them to the best uses possible, with the best energies and intelligence that we are able, and aided by all our other resources in co-operation with them. We are transforming vast areas of water-covered land into dry and productive fields. By ditching, and dredging, and building levees we are setting it free from the excess of waters and subduing it unto man's use. At the same time, we are building great irrigation dams, conserving the scant supply of water of the arrid regions, turning it upon the thirsty plains in measured quantity, at the proper time. We are thus making the barren deserts yield up their wonderful fertility in abundant crops for feeding the people. Our streams and water powers, that had run to waste for a thousand years, are being made to furnish motor force for our manufacturing plants and lights for our cities and towns. We build railroads, steam cars, telegraph and telephone lines and all the many labor saving contrivances, in order to save time and minimize labor. Sometimes we even talk about building better public roads, for the convenience of the doctors, and people who ride in automobiles; but as yet we are unable to persuade the farmers that this would be a help to them.

Thus we are conserving, and developing the things of value in the material world. The universal and stupendous waste of the past era is giving place to an one of conservation of material things, conservation of time, conservation of opportunity, and conservation of life. We are becoming keenly conscious of our former wastefulness, and are waking up to the true principles of conservation in every field of endeavor. The things that were considered of little or no value are taking on new and hitherto unheard-of importance. Man has come to regard his fellow man as a creature of value to him; and human life has come to be considered a sacred thing.

In the great progress of our modern civilization, we have found no better field for the application of the principles of conservation than in the preservation and development of child life. The infant, the little child, is the greatest blessing that God ever gave into any home. These little ones are the most valuable, and yet the most dependent of all of God's creatures. These children, the light and joy of the household and the hope of the country, are many of them dying annually from carelessness and ignorance. Many of them succumb to preventable diseases. The record of the mortality in child life is simply appalling. Out of every 100 deaths of people at all ages, 27 of these deaths occur in the first five years of life. Out of 100 deaths at all ages, 19 occur during the first year of life. Over 113,000 infants under one year of age die annually in this country from infectious diseases and improper feeding,—both of which are preventable. But, thanks to the teachings of conservation, we are learning to appreciate child life as it was never appreciated before. We are studying child life as we have never studied it before; and the light of clearer knowledge is dawning with the new era of conservation. We are studying and learning more and more, from year to year, the real cause of this great death rate in child life. We are calling into requisition the accumulated knowledge of preventive medicine, in protecting the lives and health of the children of the country. "The physician has ceased to be merely the giver of drugs to them that are sick, and has become the teacher of the laws of sanitation and hygiene. He has become the guardian of the public health, and the apostle of the gospel of sanitation."

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*Read before the Ninth District Medical Society meeting at Salisbury, N. C., May 2nd, 1912.

Let us consider briefly a few of the greatest enemies of child life, and what may be done in a simple practical way to prevent them. We will take, first, for consideration whooping cough; it is a very common disease, one that most people think every child must have, in the course of child life, and the sooner the better. Granted that every child does have whooping cough sooner or later, it makes a vast difference at what age he shall have it. During the period of ten years from 1900 to 1910 statistics show that whooping cough caused more deaths in children under five years of age than either measles or scarlet fever. Although there were more deaths among children from it than either of the other diseases named, much less effort is made to protect children from it, than from either measles or scarlet fever. Of the large number of children who die annually from this disease, out of every hundred, 54.4 die under one year of age, 23 out of every hundred die under two and over one year of age, 10.3 are under three and over two years of age, 5 are under four and over three, 3 are under five and over four. This teaches the great importance of the mothers of the land understanding the mortality of this disease, and of keeping infants and very young children out of the way of it. As the infant grows into childhood the danger from this disease very rapidly decreases. With the years of life, the mortality is cut half for every year up to the fifth year, after which it becomes comparatively small. As the mother loves the life of her infant, she should protect it against this very fatal disease, till after it has passed the fifth year of life, after which the mortality is so slight that it is of small consequence.

Diphtheria and croup still collect heavy tribute from child life. The mortality is greatest the second and third years and then gradually decreases. Notwithstanding our use of diphtheritic antitoxin and our strict quarantine rules, this continues to be one of the most fatal diseases of childhood. But, by the early and more general use of antitoxin, it can be prevented, and the mortality very greatly reduced. It is not unreasonable to hope that in time we may abolish it altogether. The best single act of the legislature of 1911, was that of providing diphtheritic antitoxin to the people of the State at cost. This is a saving to the people of the State of two-thirds of the former cost. It bringing it within reach of everybody, and enables the doctors to use it, not only as a curative agent, but as a preventive measure, whenever needed. If the recent legislature had done only this one thing, the cost of its sitting was well worth while. I wish to take this opportunity of commending your representatives from Rowan county, especially your senator, for the splendid support which they always accorded to every humanitarian movement made for the preservation of the lives and health of the people of the State. The days of chivalry are not gone, as long as we have such patriotic, large hearted, courageous men as Col. Boyden to stand up, as he did in the last general assembly, in behalf of the old soldier, the little children, the feeble minded children, the insane, and suffering humanity in general.

Measles is another disease especially formidable to child life. The common notion that sooner or later people must have this disease, and the sooner the better, is a most serious error. The sooner the people abandon this erroneous notion, and take the position that measles is a contagious disease, that can, and must be stamped out from the face of the earth, the better for future generations. The mortality from this disease rapidly decreases after the third year, hence the importance of keeping the very young child out of the way of it. After having it many young children, and even older ones, are left with other diseases such as bronchitis, tuberculosis, and diseases of the eyes, ears and throat, which go with them through life. I have known persons having this disease to deliberately and purposely go into assembled crowds of people, and look upon it as a great joke to have given it to a dozen or more of them. No more serious blunder could be made by ignorance. It is high time that we should take such steps as will protect the lives of our children against such wanton disregard of the welfare of others.

The greatest mortality in child life is due to diarrheal diseases. From them one hundred deaths occur with children out of every one hundred thousand of our population annually. In this particular field lies work of the greatest importance along lines of sanitation for the mother, the family physician, the health officer and the community. A very large part of this loss of child life is due to improper feeding during the first two years of life. Many a loved one is killed by kindness during this period. More often, it is due to lack of knowledge, or to carelessness. These diseases, due nearly always to bad hygienic surroundings, to infection and to improper feeding, are practically all preventable. I cannot undertake in a short paper to advise the mother, or the physician, but only to urge that every mother be impressed with the necessity of studying well, and faithfully, the feeding, clothing and sanitation of her child. Guard it against every source of infection. The doctor should not be content with writing a prescription for the present acute attack, but should take time to council with the mother as to the probable cause, and how to guard against it in future. If he does his full duty, many a little life, the hope of fond parents, will be preserved, to make glad the heart of father and mother.

The work of conservation of child life does not stop with protecting the life of the child. It is equally important to take that life, and make of it the best that it is possible to make of it. This is a duty resting first with the parent, but equally upon the State and the nation; for every child is not only a member of the family, but a child citizen of the State and the nation. No sooner is the child born into the world than does its welfare demand the diligent care of others, in order that its God-given faculties, as well as its physical body, may grow and develop in a healthy way, to the end that it may become a self-supporting and productive citizen.

Have you ever looked upon and thought seriously of the sad condition of a blind child, doomed to a life in perpetual darkness, never permitted to enjoy the light of day, never able to behold the beauties of earth? These unfortunate ones are deprived of the ability to become self-supporting, and, dependent upon others in all things, usually become hopeless burdens upon society. Have you ever visited a school for the blind, and been brought to realize the great number of these unfortunates, and how tremendous it is in the aggregate? One-third of the blind children of the whole country are unnecessarily blind. They are blind because their eyes were not properly washed and treated at the time of their birth. This blight of unnecessary blindness is caused by ophthalmia neonatorum, or "babies' sore eyes." Their eyes become infected at birth. The infecting organism may be effectually destroyed by dropping into the newly born infants' eyes one or two drops of a two per cent. solution of nitrate of silver. The last legislature enacted a law which makes it a misdemeanor for any midwife, or attending doctor, to fail to use the proper means for the preservation of the infant's eyes. Although we have this advance legislation upon our statute books, we must have a crusade of education in order that the public may know that much of this trouble is due to ignorance and carelessness in the management of the child at birth. When the people understand these things, they will demand that these simple preventive measures are carried out to the letter. We will then have enforcement of this law, and true conservation of the eye sight of infants.

There is just one other class of children for the conservation of whose lives I wish to enter a plea. They are the feeble minded and idiotic children of the State. Intellectually considered, they remain children all their lives. It is a condition due to arrested development of the mind before birth. Some of them never can attain a mental development beyond that of an infant, others may attain to that of a child one or two years of age, while others to that of eight or ten years of age. There are all grades and shades of development among them. They usually have feeble or deformed bodies; but some of them are giants in stature, and infants in mind. There are more than two thousand of these defective children in North Carolina. Though they are the subjects of the tenderest love and care of their parents, because of their mental deficiency; yet they are many times kept hidden away from the sight of the world, like skeletons in a closet. After they have lost their parents, or have escaped from parental control, the most feeble ones, of necessity, find only a scant refuge in county homes or jails. Of the males, a large number of them become criminals in youth, or become tramps, paupers and beggars. A feeble minded girl is exposed as no other girl in the world is exposed. Not having sense enough to protect herself, she becomes the victim of the vilest class of men. She soon becomes an irresponsible source of corruption and debauchery in the community in which she lives. Often she brings forth a new generation of defectives and dependeuts. It is remarkable how close is the correllation of feeble mindedness, and insanity, pauperism, prostitution and crime. It is the duty of the State to relieve the family, and the community, of such a burden, and to give to these defectives such development of body and mind as they are capable of receiving. Society can not escape its obligation to these children. We need, and must have, in every well informed community, a strong public sentiment that demands, as a right, that every American child, however defective, shall be educated and trained according to his need and capacity. The legislature of 1911 made an appropriation for the building of a State institution for the care and development of this class of our unfortunate defectives. We have a right to take some pride in the fact that North Carolina is the first Southern State to take the proper care of her feeble minded children. The State has never before taken a more humane step, or made a better business investment, or one that will pay larger dividends, than in providing an institution where these unfortunates can be so educated and trained, that those who can do no more, may at least lead a harmless, happy, contented existence; and that those of the higher grades may acquire in youth the capacity for some form of useful work, and then be given the opportunity to employ this trained capacity in productive labor, thus contributing to their own support.

Thanks to the great work of conservation of the public health, that has been inaugurated, man is coming to put a higher value upon man, and the chlld is coming to be appreciated as our best possession, our best opportunity, the pride of the State and the hope of the nation.

Public Health and Preventive Medicine*

By Dr. C. M. Van Poole, Salisbury, N. C.

Fellow Members, Ladies and Gentlemen:

Public health and preventive medicine are just now claiming the attention of the people, not only of this country, but of the world wherever the flag of civilization has been unfurled, and it is our purpose tonight to, if possible, have a better understanding of this important matter.

A vigorous, healthy population is the greatest asset of which any nation can boast. Health is the foundation of all prosperity and happiness. Every life has a value in dollars and cents. Every life has a value that cannot be measured in dollars and cents. Farms, factories, forests, mines, and all similar things classed as wealth are only valuable in proportion as the population is able to develop and enjoy them. We desire wealth, in fact, the great curse of this hour is the mad scramble for wealth, corrupting, destroying, undermining the morals of the country, forgetting that intrinsic value resides only in man; the value of things is derived from man; and the greater or less value of things is dependent upon the character and the quality of man. A lively consciousness of this fact is the principal motive of progress in all well-governed countries. Therefore, the best government for any man is that which is best suited to develop the best possibilities that are in him. The form of government, in other words, must be determined by the matter of development. The word government suggests a denial of natural rights and the substitution of duties for the good of the individual in the common good. The fullest exercise of natural rights is found in a state of savagery; the highest conservation of rights is found in a state of civilization—in that civilization which makes fullest denial of natural rights for the well-being of society. No personal rights can stand in the way of the individual and social good. In the highest civilization, the sense of selfishness must give place to the sense of service.

Preventive medicine, than which there is no finer fruit of civilization, is founded upon a denial of natural rights. These principles we should strive to educate men to appreciate, and when we come to the full appreciation of the divine economy of service and duty, preventable diseases will indeed be prevented and human life correspondingly protected. Therefore, when we remember that more than one-third of the sickness, suffering and deaths of the country must be placed under the head of preventable diseases, diseases that could and should be prevented, is it not time that those in position to act should bestir themselves as never before and use every legitimate means within their power to control and stamp out all preventable diseases?

Much valuable legislation has been enacted by the national government looking to the care and protection of domestic animals, and some little has been done in the interest of public health, and, so far as it goes, has been worth a great deal to the human family. Smallpox is no longer a dreaded disease; yellow fever in Cuba and the United States is a thing of the past; anti-typhoid vaccination, more especially in army service, is being experimented with; pure food laws; restrictions on alcoholic proportions in prepared drugs, are matters that will tell for the common good. As to anti-typhoid vaccination a wide field for investigation has been opened up. Much good has already been accomplished, and many valuable lives saved, yet the whole matter is still in embryo and will require quite much and tedious experimentation.

Statistics relating to typhoid fever and its prevention might be of more or less interest. In the Spanish-American war the United States had a total of 107,973 men. Of these, 20,728 had typhoid fever with 1,580 deaths, being 19¼ per cent. More than 86 per cent. of the entire mortality of the war was from typhoid fever. In some regiments of 1,300 men there were more than 400 cases. In the Boer war the British had 31,000 cases of typhoid fever with nearly 6,000 deaths. In the Franco-Prussian war there were 73,396 cases with nearly 9,000 deaths among the Germans alone. Fifty per cent. of their total loss was due to this disease. History tells us that, during the civil war between the States, the Union army alone had more than 80,000 cases of typhoid fever.

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*Read before the Ninth District Medical Society meeting at Salisbury, N. C., May 2nd, 1912.

The above figures show the enormity of this dread disease in the armies of the world as it has been in the past. At present, however, the medical department of the United States army has engaged to, if possible, stamp out much of this high mortality rate. Anti-typhoid vaccination has been carried on rather extensively in the service and already the mortality from this disease among those protected is seven times less than those unprotected. The death rate of the cases of fever in those who had been vaccinated is one to ten and a half, while those of the unprotected amounts to one to seven. This is only one of the hundred diseases that should be attacked by our national government, and the splendid results obtained in this should be a mighty stimulus and incentive to do greater things.

We should not offer unmerited censure of those in authoriiy, but when we see our national law-makers vastly more concerned about the health of domestic animals than of the human race, it is enough to arouse our righteous indignation and invite hearty disapproval. In the last ten years the United States government has expended more than forty millions of dollars, and is now endeavoring to increase that amount more than five times over, to prevent tick-fever in cattle, cholera in hogs and chickens, pests to crops and trees, and to protect other property having money value, while more than one-third of the deaths of the human race are preventable and could be avoided, but not a voice is heard to cry out in defense of this dying host Experts and funds are in abundance at our national capitol, ready to go anywhere for investigation or to prepare literature relative to animal or plant disease, agricultural resources, water powers, or other commercial interests, but the citizen will inquire in vain for information about protecting his family from the ravages of preventable disease. We have plead for years for a national bureau of health. Yet but little has been done, and most of that in promises. The health department of the nation should have representation in the national cabinet, but when will it be and how shall it be brought about? Most medical men are cognizant of these facts, but, unfortunately, most medical men are not cognizant of the fact that each has a part to perform in this life-saving project. Poor, suffering humanity is at the mercy of those who know better, whose privilege and duty it is to do better; and, if the interests of the informed were duly manifested and coupled with uninterrupted perseverance, soon the sanitary conditions of every community would be greatly improved. We maintain that it is the duty of the medical man to work, and work along these lines until good health shall be more contagious than sickness, and that, although in direct conflict with his own interests, he should urge health reform and sanitary regulation and do all in his power to bring about the desired end.

And now, a word to the profession; let us be a little more personal in this matter. Are we, as physicians, doing our duty as regards the people in common among whom we live? Are we awake to a working sense of our responsibility along this line? How many have requested the Secretary of the State Board of Health to place in the hands of the unfortunate consumptives and their families literature bearing upon the subject of prevention? How many have asked for the analysis of drinking water where typhoid fever was prevalent? How many have been concerned about the water shed of the city? Who cares how much the streams leading out from the city are polluted with the death-laden sewage that is allowed to empty into them untreated? How many have co-operated in the eradication of the child-destroying hookworm disease? What encouragement has been given the health officers of the town and county, and to the officers of your county society? What has been done to encourage and assist the councilor of your district in bringing about better society work and, in turn, better work as sanitary engineers? These questions must be answered by each for himself; no one can answer for us. When we remember how little we, as medical men, have done, how derelict in duty we have been, is it surprising that our legislative committees have met almost constant indifference or antagonism from both legislative bodies and the people? To the laity medicine has always been an occult, mystic science, and still more, because, as is often seen, the medical profession has not been entirely without discord. Unfortunately discord is often seen between physicians competing for the same practice, and more unfortunate is it when, as we have seen, this discord is fostered by their respective lay friends. Discord, when fostered, will create sentiment, and even prejudice against doctors, which becomes a habit of thought with most people, except as to their own physician. When once formed this sentiment is not easily dispelled, and is often the means of bringing about a great deal of gossip and criticism.

And so, we are here to plead for a united, determined profession. Let us strengthen the arm of our city and county board of health, and, instead of offering criticism, assist them whenever possible. There should be frequent inspection of schools, dairies, bakeries, groceries, factories, tenements, sewerage and garbage systems, water sheds, and where prisoners are kept in close confinement. But, it is hardly possible to do these things unless the health officer has special training and aptitude for this work and a salary commensurate with his labors and responsibilities. It would be the best of investment to provide a comprehensive, effective health system, because the greatest annual tax upon our people is not that paid into the municipal treasury, but the long, unrecognized tax for preventable sickness and funerals.

Volumes could be written along this line but time will not permit. We might as well make up our minds that these things will not come without effort. In any event it is an educational work and our profession has the knowledge which fits and imposes the duty of leadership. It will involve much unselfish labor and all may not be equal to it. How doctors are to be compensated under this new order we have not stopped to enquire. We know that it opens a new field of unlimited possibilities, that the doctor of the future will be a far more important and useful man than the one of the past, and we only ask for such a league with the people that will insure success in every community.

Before closing this paper I wish to say a word to the public in general. Parents, upon you depends greatly the future health of your posterity. The home can be made the conservator of health or it will be either a predisposing or direct cause of premature decay and disintegration. Apartments without proper ventilation and light invite disease, especially that universally dreaded disease, tuberculosis and consumption. We read almost daily that it is possible to thoroughly immunize against tuberculosis. We would like to reiterate that, although there is no deadlier foe to the human race today than this monstrous white plague, yet, there is a way of escape. Solomon says, "The prudent man forseeth the evil and hideth himself. The simple pass on and are punished." And so it might be of many of the fatal diseases of today. Consumption, with proper sanitary regulations and observance of necessary physical care, can be completely stamped out and thousands of valuable lives annually saved to their families and to the nation. It is with a very real sense of melancholy that one contemplates the long death roll of those of the world's great men and women who have succumbed, untimely, to the tubercle bacillus which is, and has been, through countless generations, by far the most potent of all death-dealing agencies. Would you hear me if I should tell you that there are at present, in North Carolina alone, 14,000 cases, and that one-fourth of all preventable deaths are due to this disease? Statistics prove that, in the United States, there are one and a quarter million of people infected with tuberculosis, five hundred thousand of which are bed-ridden. The death rate from this disease is appalling, reaching the enormous proportion of one-fourth of all the deaths occurring in the wage-earning period of life. As Osler so forcibly puts it, "In four hundred homes there is lamentation and woe tonight; husbands for their wives, wives for their husbands; parents for their children, children for their parents. A mere repetition of yesterday's calamities. And, if the ears of your heart be open you can hear, while I speak, the beating of the wings of the angel of death, hastening to the four hundred appointed for tomorrow." Men of authority, what of the night? When we stop to consider that two per cent. of the entire population of this country has been swept into eternity in the last ten years by this deadly foe, that more than 113,000 infants under one year of age are destroyed annually by infectious diseases and improper feeding, that typhoid fever and other preventable diseases are claiming a proportionately large percentage of the human family, the question very naturally arises, not only has each one done his or her duty, but have health officers and health boards done what they could to stop the rapid onslaughts of these messengers of death? The whole power of a united profession should be used as it has never been used in the past. Communities and the law-makers who represent them, must be educated to realize the dangers which exist in allowing preventable diseases to spread unchallenged, and, in view of this fact, we plead for a responsive public. Officers may command, teachers may persuade, undertakers may make daily demonstrations and funeral processions may bring vividly to mind the truthfulness of the above statements, yet, in spite of these, without a responsive public, without a determination to act and act quickly, nothing will be accomplished.

A city, a community, a county, a State, a nation, will be just what its occupants make it. In this day of progressiveness and expansion we are called upon to take a stand. We are either drones, conservatives, or progressives. We need no drones in this conflict. Conservative men and women are useful sometimes. They are the brakes on the wheels and sometimes serve a good purpose, but in this life-protecting movement we so much need progressiveness. Propelling force is what is mostly needed just now, men and women who are not only ready to do something, but who *will* do something. In some communities the good women have organized to compel the enforcement of the law. Shame on the municipality of any town or city that must be forced to do its duty. County and city boards have it within their jurisdiction to enforce the laws of sanitation as well as all other laws. To these we especially appeal. Will you not come to our assistance? Will you not help to save the lives of your voters, your wives and your children? We leave the question with you.

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Report of Ten Cases of Pellagra Treated with Salvarsan.

By Dr. F. D. Austin, Charlotte, N. C.

There has been much said of the treatment of pellagra with various drugs, and as a whole there has been a great deal of disappointment with the end results of the various treatments, but suffice it to say that the arsenic preparations have always stood first and foremost in the treatment; we being able to control the disease better with arsenic than any other remedy and the larger the dose the patient can tolerate the better the results seem to be.

The fact that each .6 gm. of salvarsan contains 34% arsenic led me to try its effect on pellagra by its administration to a number of patients that have fallen into my hands for treatment within the past twelve months.

I herewith submit a report of ten cases which I have treated with salvarsan and followed up their conditions.

Case No. 1.—Mrs. C.; July 12, 1911; age 26; married; two children, youngest three weeks old.

Patient had typical pellagra lesions on hands, arms, feet, face, neck, mouth and genitals. Very profuse diarrhea which had been profuse for about six weeks but getting very much worse after birth of child. The child was healthy in every respect. Her temperature ranged from 101 to 104° F., pulse 110 to 130 and very weak. From all appearance she looked as if the end was only a question of a few hours. I sent her to the hospital at once and gave her .6 gm. salvarsan subcutaneously. Patient had very bad night but was a little quieter the next day and within 72 hours the lesions began to improve and continued to do so until they were almost well, and there they took a stand-still appearance for about a week. Then I gave her .6 gm. more on July 21-11. The patient continued to improve until apparently well, gaining in weight to above her average weight and is now entirely well so far as we can see.

Case No. 2.—Mrs. P.; July 10, 1911; age 38; married; six children, baby two years old.

Patient had the typical pellagra lesions with the mental symptoms also, despondency, suicidal mania, etc. Patient menstruated when child was eight months old and until it was twelve months old, then the menses stopped and about the same time the pellagra symptoms developed. She was confined to her bed all the time. I gave her .6 gm. salvarsan subcutaneously on July 16-11, and after the pain from the inspection passed off, which was about twelve hours, she rested O.K., and in about three days began to improve, the lesions drying up and scaling off, the sore mouth improving, and the diarrhea stopping, and her menses returning about November 1st. She has continued to improve right along and is now about 4½ months pregnant, and from all appearance is entirely well.

Case No. 3.—Mrs. D.; July 26, 1911; age 53; widow; five children.

Patient developed the pellagra symptoms summer of 1910 but were very mild, and began to get very bad in June, 1911, with the usual diarrhea lesions on the hands, arms and feet. I gave her .6 gm. salvarsan subcutaneously July 31-11, and the patient began to improve within the next week and is entirely well now so far as I am able to see.

Case No. 4.—Mrs. B.; August, 1911; age 32; married; five children, baby four months old.

Patient developed the pellagra symptoms in June, 1911, which got progressively worse until I gave her .6 gm. salvarsan subcutaneously on August 10-11, and she began to improve on the 14th and continued to do so until she was apparently well.

Case No. 5.—Mrs. C.; August 1, 1911; age 31; married; four children.

Patient developed typical pellagra symptoms April, 1911, eruption on dorsal surface of hands and feet, also on back of neck and across the nose, moderate bowel disturbance. I gave her .6 gm. salvarsan subcutaneously August 5th, 1911, and she began to improve within a few days, all the lesions clearing up entirely and she is apparently well now.

Case No. 6.—Mrs. S.; August, 1911; age 52; married; seven children.

Patient developed pellagra symptoms spring of 1908 but was never sure of pellagra till August, 1911, when I was called in and she was in a dying condition. An awful condition presented itself to me. She was simply prostrated with virulent lesions on the hands, feet, face, neck, mouth, and genitals, involuntary stools every few minutes.

I gave her .4 gm. salvarsan subcutaneously just as soon as I could get her in a hospital. Patient's condition seemed to come to a stand-still for a few days then worse again. .6 gm. was given ten days after the first but death overtook us on the third day after the last dose.

CASE No. 7.—Miss H.; age 63; single.

Patient developed pellagra symptoms April, 1911, which grew progressively worse till July, 1911. I gave her .6 gm. salvarsan subcutaneously on July 16-11. She began to improve and got into pretty good condition but in March, 1912, relapsed and then I gave her .6 gm. intravenously and she began to improve within the next four days. Fourteen days later I gave her .6 gm. intravenously again and now she is very much better than she has been any time since she developed the disease. Will give her another dose if needed.

CASE No. 8.—Mrs. W.; age 26; married; no children.

Patient developed typical pellagra in the spring of 1911, which grew progressively worse, patient becoming demented about January 1st, 1912.

I gave her .6 gm. "606" intravenously February 12. Patient returned home ten days later alone and feeling fine and entirely well so far as we can see.

CASE No. 9.—Mrs. R.; age 44; married; two children.

Patient developed signs of pellagra in the spring of 1910 but they never fully developed till July, 1911. She had well developed lesions on hands, arms and feet, with a little dementia, also a diarrhea.

I gave her .6 gm. "606" and she began to improve at once and continued to do so until October, 1911, when she had a little relapse but it soon passed off and as yet has not returned.

CASE No. 10.—Mrs. McD.; age 49; married; six children.

Patient presented typical pellagra lesions November, 1911.

She had .6 gm. "606" intravenously and she promptly began to improve and got apparently well.

In conclusion, I wish to state that salvarsan has acted far better than any of the other arsenic preparations, or in fact any treatment we have had heretofore.

If we will give it intravenously, thereby avoiding any abscess formation at the site of the injection, or it becoming encysted and not be absorbed but getting it into the blood current directly, and watch our patients very closely for the least appearance of the disease, and give other doses from time to time as indicated, but not oftener than two to three weeks, I believe we can cure a large percentage of pellagra.

Pathology of Cystitis.

By G. F. Duncan, M.D., High Point, N. C.

The field of pathology in cystitis has been greatly enriched by the ingenious invention of Nitze's. In fact, the cystoscope has placed the pathology of this disease on a true scientific basis. As a result of more thorough investigation into the pathology and etiology the term cystitis is now almost relegated to the rank of a symptom by some observers. In my discussion I shall purposely omit the pathology of the subacute form, taking up only the acute and chronic forms. There are comparatively few cases of true acute cystitis, as is evidenced by the microscopical changes in the bladder epithelium. Most cases of so-called acute cystitis are those of chronic cystitis exhibiting acute exacerbations. They begin pathologically as chronic cases. In this way has been explained those baffling cases of former days ascribed to exposure to cold, etc. In most so-called acute cases a chronic condition or inflammation of the bladder has been progressing, which has lowered the resistance of the organ predisposing to the acute increment.

The true acute cases show cloudy swelling of the epithelial cells with desquamation. The mucous surface is red and ecchymotic. Also swelling of the submucosa, and pervading all is intense congestion. When the detachment of epithelial cells goes beyond those of the superficial layer and involves the polygonal cells solution of continuity results and small points of ulceration are made manifest, which may spread at the periphery and also dip further into the bladder structure. The pathological picture as seen through the cystoscope shows the characteristic alteration in diseased part of the bladder.

The whole of the bladder surface is but rarely diseased. In such rare cases the cystoscope shows nothing but a dark, red surface. In ordinarily localized inflammation it is comparatively easy to differentiate the diseased portion which shows injected blood vessels, edema, ulceration, excess of secretions, etc. The pathology of the diffuse and circumscribed forms are studied in this way.

Reverting to type I next come to chronic cystitis. Here are demonstrated cases due to slow and long acting continued irritations. The urine is an unfavorable media for the development of bacteria and those which are present in the urine exert an irritative rather than actively destructive influence which would be the case were they to proliferate in abundance. The cellular picture represents one of compensation and resistance, as is shown by the hyperplasia and hypertrophy. There being an increase in size of the cells as well as a numerical increase of elements. In the muscular and serous coats thickening at first takes place, followed later by fibroid degeneration. The bladder becomes discolored and grayish. In certain advanced stages the tissues break down and form ulcers of various shapes and sizes. Sometimes the ulcerating surfaces give rise to hemorrhage, which may at times be excessive. The destructive influence on the bladder wall may cause abscess formation, which abscesses rupture into the bladder. The particular location of the lesion in the bladder has a very definite and important pathological bearing, as will be explained by other papers on etiology and diagnosis.

As all cases of cystitis are due to infection, it is very important to locate the pathology with reference to the position of the ureters and the entrance of urethra in order that the portal of entry of infection may be determined. For instance, in tuberculosis of the bladder the mucous membrane near the urethral opening is more often the part affected. In this trouble the mucous membrane becomes extremely red, exhibiting puffiness with gaping of the uretral orifices. Within the edematous are numerous round or oval elevations from the size of a pin head to that of a small lentil, presenting nodules and ulcers.

Diverticulum of the bladder might be mentioned, as it is occasionally developed in the course of the pathology of certain chronic conditions.

Certain phases and stages of the inflammatory process suggest a pathological classification, such as catarrhal, hemorrhagic, ulcerative, suppurative, exfoliative, superficial, and foreign body cystitis. Also exudative cystitis. Under exudative cystitis might be mentioned the so-called diphtheritic membrane, presenting coagulation necrosis. Exfoliative cystitis is most virulent and results in the destruction and detachment of the mucosa. The other phases and stages mentioned above has been explained in the general pathology.

The Care of Inebriates at Home.*

By Tom A. Williams, M.B., C.M., Edin., Washington, D. C.

When a person is sodden with alcohol or other drug, and has been so for several months, treatment in a sanatorium is, I believe, more economical, efficacious and rapid than is treatment in his own home. No more need be said here of treatment in the sanatorium.

When a patient is in a state of profound mental and physical depression or excitement from chronic imbibition of narcotics, and there is a suspicion of further physical or mental derangement, the need of exact differentiation may demand the services of a neurological specialist. I need not expand this admitted principle. Like the foregoing, it is well known. In neither case would a general practitioner assume responsibility.

But a diagnosis is seldom long delayed; stay in a sanatorium is comparatively short. In each case, however, the after care of the patient may be long. In the vast majority of cases, it should be in the hands of a general practitioner. It is a pity that few are yet equipped to help the poor sick souls who have taken to drink. If they are not helped the majority will relapse; and as a very little help suffices in most cases, it behooves practitioners to become acquainted with the principles with which to guide such patients in their struggles. A few of these I shall try to set down.

THE PATHOGENESIS OF INEBRIETY.

Drunkenness is not an individual disease. Not even are all addicts neurotics; though they generally are. Those who drink from habit, convention, or conviction and could cease if they wished, are not subjects for medical care, and do not concern us here.

Of the remainder the largest number, I believe, are persons suffering from feelings of inadequacy for the duties they have to perform. They are "psychasthenics" potentially, if not as regards active symptoms. Like every one else, these persons have ups and downs; but the downs are often prolonged. The inconvenience, discomfort and even suffering of their depressions makes them seek relief. The means they take depends upon circumstances. If the environment has provided ready access to alcohol, this means may be used to suppress their painful feelings. If, during sickness, opiates have been administered too long to such a person, he may become addicted to their use in order to obtain the relief which again makes life seem worth living.

But the temporary removal of cravings is only one step towards that which these persons require. It is our duty to ascertain the cause of their addiction, and to remove that. The psychasthenia which is at the root of it must be met. Of the physical factors in the causation of this, I shall not speak at length. Their removal is comprised in the resources of medical art. The most conspicuous part in the physical treatment should be played by the physiological measures concerned in diet, bathing, exercise and rest. Second in importance to these are perhaps the measures concerned with the internal secretions, in which unfortunately our knowledge is at present deficient.

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*Read before the Medical Society of Virginia at Richmond, October, 1911.

THE TREATMENT OF PSYCHASTHENIA.

It is psychic measures which are our main stay in the reconstitution of these patients' powers. It is true that in very severe cases the giving way to their desolating feeling of inadequacy and obsessions and fears is almost imperative. But these cases are less common than those in which the giving way to the feelings has become a habit which has occurred from lack of the proper training in inhibition which most normal people acquire, accidentally perhaps, by force of circumstance In these patients, the physician must do by deliberate intention what has failed to be effected fortuitously. The patient must be re educated.

The first step must consist of the physician's conveying to the patient the fact that he understands his mental constitution and demonstrating the nature of his defect, and that he is in need of re education for its removal. This task is easy to a physician who is trained in psychopathology. But the average man at present would be likely to confuse the patient, and make him skeptical of the powers of medical science in his case. Hence, it is better if the psycho-diagnosis and plan of treatment are both made by a psychopathological expert in consultation. From him the general practitioner ascertains the pathogenesis and the principles and means to be used in reeducating the patient towards the removal of his psychasthenia.

While, therapeutically speaking, every man's impulse or craving to drink or debauch can be destroyed by denudation and attrition, yet sociologically speaking, it is not always worth while, and the effort needed may be more fruitfully expended otherwise. But in a majority of psychasthenics, when they are otherwise estimable, a re-education of their perverse craving is both practicable and profitable in the making of contentment out of unhappiness, and usefulness to others from a burden to friends.*

THE PRINCIPLES.

1. Acquisition of tolerance of the feeling of insufficiency, though not being at one's best and highest mental level.

2. Acquirement of the poise which does not hurry, fuss and bustle in face of heavy work or responsibilities.

A true philosophy of life is here an enormous help, a sentiment of the relative littleness of one's own task and importance. The dread of failure must be eliminated by minimizing to the patient the consequences of temporary lapses into discouragement and inadequacy. He must be shown their inevitableness, unless mental gymnastics have strengthened him beyond them.

Isolation is usually detrimental rather than beneficial in psychasthenics. Forced feeding, electricity, baths, massage, demand efforts which the physician had better utilize in real therapeutics instead of these shams of helps.

The preliminary objects are attained by instruction, persuasion, knowledge. The patient must be taught himself, his psychology, his limitations. His expectations regarding his powers must be corrected. He must know himself biologically, *i e.*, understand his place in the cosmos, his mental machinery as a function of ontogenetic and phylogenetic adaptation. The relics of false notions, the atavisms of metaphysics and superstition, must be eliminated from his creed of life. In other words, he must acquire the rudiments of functional and genetic psychophysiology as we know it today.**

3. But all this will often fail to remove suffering or develop self-control, unless further assistance is given in application of methods to overcome vicious mental habits.

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*It is taken for granted that the various psychoanalytical methods for discovering the genesis of psychological perturbations are at the clinician's command, and that he understands the significance of the ideogenetic effects which so often determine conduct unrealized by the patient. The mechanism of some of these is discussed by the author in "Notion and Emotion in Traumatic Neurosis," Journal of Abnormal Psychology, June, 1910. "Genesis of Hysterical Status in Childhood," etc., Medical Record, August 6, 1910. Also by Morton Prince, Journal of Abnormal Psychology, and by Freud and his followers, whose methods and data are of great value except when they are vitiated by fantastical interpretations or rendered misleading by observations colored beyond reliability through a forced conformity to a cherished theory as to pathogenesis.

**Of course the method here outlined is only one of the applications by which can be carried out the principle of involking the attention toward concentrating the mind in a desired direction. Others' each successful in certain situations, are (1) A reorientation of ideas, as by religious conversion; (2) the learning to ignore one's physical sensations, as by adopting Christian Science or other convenient nepenthe; (3) the emotional appeal of a great affection or the desire for respect of others; (4) the leaning upon another will, as in hypnosis or other so-called suggestive therapeusis Of these methods, the second and fourth are obviously undesirable, while the availability of the others is not at therapeutic command.

Fear, worry, anxiety, doubt, mental cowardice, craving of uplift, are not removed in all cases by mere philosophical conviction. Practical exercises are required.

Thus, the knowledge that a sniffing tic arose from a former crust in the nose, would not help a patient to abolish the desire to sniff unless, by organized and systematic exercises to control the desire by inhibiting the act, he put himself to succeed. So a knowledge of why he craves alcohol does not remove the craving. Exercises in control are needed to abolish the psychic state of which the craving is only one expression. The principles of this is the same as in that of the psychomotor discipline which is used in curing tic. It consists of the frequent concentration for short periods upon simple, easy tasks, which are made more complex and difficult gradually. It is merely a mental and moral gymnastic. It is in the choosing and adapting of these exercises to the individual that the physician will need judgment. But far more exacting is maintaining the patient's attention strictly upon the task. It is so easy in itself that automatic performance is a constant temptation. This is worse than useless of course; but is most difficult to obviate. The work is really a pathopedagogy.

The series of exercises subjoined give eome idea of the method to use. These are in the main taken from the work of Vittoz, who has been very successful in teaching self-control to psychasthenics who have lost it. The exercises can be modified and supplemented at the wish of the physician. But the important matter is not the exercises themselves. but the way in which they are done. The greatest care must be taken that the maximum of attention is paid by the patient to the particular exercise he is doing, in order that the power of concentration may be practiced. By attaining this, a powerful suggestion is furnished to counteract the suggestion of failure which is dominant in the mental attitude of these patient's, who have so often succumbed to the play of depressed feeling. This, however, is only a subsidiary factor; for the real essential is the actually increased power of self-control.

EXERCISES IN CONCENTRATION FOR OBTAINING MENTAL CONTROL.

Each must be done with the greatest intentness and exclusive attention while quiet and alone About ten minutes every two hours during the day should be devoted to the work.

First Day.—1. For concentration in the control of movement and by willing the act very clearly.

2. For concentration upon impressions of touch: Take in hand a marble, eyes closed. Think of it (a) size, (b) contour, (c) smoothness, (d) consistency; each separately.

3. For concentration upon impressions of hearing: Listen to the action of a watch for thirty seconds as to (a) loudness, (b) musical note, (c) regularity, (d) grouping of sound into series.

4. For concentration upon impressions of sight: Look at a marble, thinking of the various properties ascertained by touch, as well as its color.

Second Day.—1. Bend the right arm very slowly with full consciousness of each movement and by willing the act very clearly.

2. The same as (2) above, substituting a cotton reel for the marble.

3. Listen to the street car as to the same qualities.

4. As 4 above, substituting a cotton reel for the marble.

Third Day.—1. Same as 1 above with left leg.

2. Same as above with a pencil.

5. Repeat 5 above in imagination.

4. A statement as to the preceding character as well as its esthetic.

Fourth Day.—1. Same as 1 above with right leg.

2. The same as 2 above with a small bottle.

3. Repeating imagination.

4. Same as 4 above, substituting a picture.

Fifth Day.—1. Bending the trunk forward.

2. Repeat 2 without the objects.

3. Repeat 3 in imagination.

4. Repeat 4 from memory.

Sixth Day.—1. Bending the trunk to the right.

2. Repeat 2 without the object.

3. Repeat 3 in imagination.

4. Repeat 4 from memory.

Seventh Day.—1. Bend trunk to the left.

2. Repeat 2 without the objects.

3. Repeat 3 in imagination.

4. Repeat 4 from memory.

When perfected, each exercise can be done in imagination by intense concentration.

From the indifferent matter which forms the exercises, the patient proceeds to attempt control in matters of daily life. The physician first selects matters into which the least feeling enters, and gradually imposes more and more difficult exercises, until finally temptations are deliberately chosen, in order that practice in their conquest may be given. Until this stage is reached, the patient must be protected from temptation, at least during the periods when his mental level falls. To do this, I have found it sufficient that the patient be imbued with the need of immediately communicating with his physician when the psychasthenic phase occurs.* It is then usually easy to carry him through this until he recovers from his depression He is only longing for moral support; and his lack of will at these times is satisfactorily compensated by that of the physician, by whom his occupation during the next few hours should be directed. It is not necessary that the physician do this in person; but he must know, by a study of his patient, what is most suitable under the conditions of each case. The patient usually leaves buoyed up with the will to undertake what he has been directed to perform; and in the performance, his aboulia and feeling of insufficiency generally vanish quickly.

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*The advantage of the physician seeing the patient is that he can then detect any metabolic or other physical disturbance which may be the source of the patient's craving, in which case physical measures supplant psychiatric.

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Ectopic Pregnancy.*

By C. Banks McNairy, M. D., Lenoir, N. C.

In presenting this subject to the District meeting, my object is not that I have anything new or of special interest—nor do I expect to enter into a lengthy discussion, as there are few subjects in the whole range of practice that excites so lively an interest in the general practitioner as extra-uterine pregnancy, and of all the mysterious processes of life, the most mysterious is that an ovum can become fertilized, and grow in ground foreign to its normal development. Kelly says there are few physicians who have been ten years in practice without seeing at least several instances sometimes in a single year. This, however, has not been my experience, as I had practiced almost double this time before meeting a single case or at least before I recognized one, and I think I was reasonably careful, and on the constant out-look, as I had been severely criticized by some of my professional brethren, who went so far as to say that I had been unable to recognize them, nevertheless I congratulate myself that I have had no fatalities along this line. I will admit, however, that there are many in the very early stages that go by unrecognized and pass off as a simple dysmenorrhœa. I shall endeavor to point out a few of the most important diagnostic points only, and the causes and treatment, hoping to revise or excite your natural interest in this extraordinary phenomenon which is naturally great and must be enhanced by the fateful possibilities of the situation, as well as the tragic outcome which may at any moment determine a doubtful diagnosis and rob the poor victim of life; therefore it becomes very necessary to the general practioner into whose hands this class of patients must necessarily fall that we should ever be on the alert, because it is only in the earlier stages they belong to the practitioner alone. As soon, however, as the diagnosis is made the case should at once, as a matter of propriety, be transferred to the domains of surgery.

Etiology.—The spermatozoa meets and fructifies the ovum at or near the ovary and it is the function of the uterine tubes, which has afforded the spermatozoa an avenue of access from the uterus to the ovum, to transmit the ovum in turn to its proper resting place in the uterus; therefore anything that has caused a contraction or lessening or stricture of the ovarian tube, that tends or prevents the ovum from being transmitted back to the uterus, may be said to be the prime cause. Any pelvic inflammation during the child bearing period may cause stricture. To my mind the most common and frequent cause is gonorrhœa and puerperal sepsis, overitis, appendicitis, peritonitis, salpingitis, endometritis and fibroid tumors, and ovarian cysts may by pressure cause constriction. Any case in which there has been a laparotomy or opening of the abdomen may cause adhesions and thereby constrict the caliber of the tubes (where they have not been removed).

Sterility of Long Standing.—Last but not least, external migration has been recognized as a frequent cause where the ovary on one side has been removed and a tube on the other,

Symptoms may be those of ordinary pregnancy but not common, usually irregular or cessation of menses. In many cases, however, they are undisturbed. In many instances the facts concerning the menses are very unreliable, especially in unmarried women and girls. Dr. Barton Hirst tells me he has had a number of cases in girls eighteen and under. Extra-uterine pregnancy is much more common than was formerly supposed to be. In 3500 general autopsies, Formad found 35 ectopic pregnancies, or one per cent. The late Dr. Joseph Price, of Philadelphia, told me a short while before he died that some years before he had asked the coroner of Philadelphia why it was he never had noticed in his reports of sudden deaths of women extra-uterine pregnancy given as the cause, said he had never looked for it. Dr. Price suggested that after that he open the abdomen and look, which he did, and to use Dr. Price's language he often found a fetus crouched upon a coil of intestines, and after this a greater per cent. of women dying suddenly upon the streets of Philadelphia during the child bearing period, the cause of death given being extra-uterine pregnancy and not heart failure.

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*Read before the Ninth District Medical Society meeting at Salisbury, N. C., May 2nd, 1912.

Drs. Babcock and Krussen of Samaritan Hospital, Philadelphia, say they average from two to three per month. Dr. Hirst tells me in his clinic of four thousand women last year, he found between twenty-five and thirty extra-uterine pregnancies. In all cases of women during the child bearing period where there is acute lancinating pain in pelvis or lower abdomen followed by faint collapse, high pulse, normal, often subnormal temperature, it is well to consider extra-uterine pregnancy first, and if not eliminated by differential diagnosis, should be handed over to the surgeon at once. This sudden and excruciating pain may not be confined wholly to the pelvis or lower abdomen, but may extend to the whole abdomen followed by nausea, vomiting bile, cold extremities, cold sweat, pinching of the features, rapid and weak pulse, tenesmus and irritability. In serious cases the pain out-balances all other symptoms. These symptoms may subside and convalescence may be established. In the diagnosis one will have to differentiate extra-uterine pregnancy from ruptured pyosalpinx in which there is always a history of infection, pulse not so rapid, rise of temperature from the beginning, pain less, but continues, no hemorrhage, and from pelvic peritonitis and cellulitis, also history of infection, onset gradual, no hemorrhage, temperature elevated, the mass usually hard, fever continues, always leucocytosis in early stages, and from uterine and ovarian tumors, history early symptoms, onset slow, the mass sharply circumscribed and usually movable, none of the normal signs of pregnancy, no discharge of the decidua, also must be differentiated from hemorrhage into an ovarian cyst, in which you have history of pre-existing tumor smooth and tense and no signs of normal pregnancy.

In my opinion the hardest thing to differentiate from is appendicitis, acute suppurative, when the extra-uterine is in the right side and from six to eight weeks duration. Only a few days since I witnessed an operation for appendicitis in one of the leading hospitals in Philadelphia, in which the family physician had made the diagnosis and was confirmed by the house physicians but upon opening proved to be extra-uterine pregnancy of the right tube.

Treatment to my mind is but one, and that is surgical; open up the abdomen in the median line or over the most prominent part of the tumor, remove the tube, sac clots, etc., and drain super-pubic, or as Dr. Babcock does, remove them through the vagina, or rather opens up through the vagina, places on clamps and allows them to drain, removing only such parts as can easily be gotten at. This operation, however, does not appeal to me, although Dr. Babcock says he has removed sixteen this way without any fatalities.

I will now report my cases, trusting that none of you have had the troublesome experience that I have had nor suffered the mental anguish that I have passed through in my first experience.

No. 3.—Mrs. J.; married; mother of four children; had been confined to house for twelve months with what was supposed to be chronic or tuberculous diarrhœa. About two weeks before being brought to the hospital was taken suddenly with a pain in the abdomen, followed by profound shock, so much so that two physicians spent the night with her administering heart stimulants, etc. I was called the following day, and found patient much exhausted, abdomen much distended and general peritonitis; diagnosis not positive. I did not see the patient for two weeks or more, when she was brought to my place in a very weak condition, with quite enlarged tumor in the left ovarian space, extending a good ways up. in the abdomen. After treating her for a few days abdomen was opened, and the left ovarian tube had sluffed entirely loose from the uterus. The sac was of considerable size, great amount of clots and pus removed, drained super-pubic and patient was able to return home in three weeks.

No. 2—A colored woman, aged 33; married; had three living children, and a number of abortions; well as usual until one afternoon while in the yard chopping wood was seized with a cutting lancinating pain in lower abdomen, fainted and had to be carried into the house. A physician was called and found patient almost in a state of collapse, suffering from shock, cause of which he was unable to find. He administered stimufants and treated her for some five or six days. Pulse continued high, temperature gradually increasing, abdomen very much distended. I was called six days after the attack, found considerable mass in region of right ovary and tube extending down into Douglas' cul-de-sac and very tender upon pressure and could easily be outlined above MacBurney's point. Our diagnosis was a ruptured uterine pregnancy of the right tube or ovary. We prepared for operation and operated in her own home. We opened up, found fetus living loose in abdominal cavity, removed fetus, sac, clots, drained, and woman returned to her washing in six weeks.

Case 1.—Miss C.; aged 26; school teacher; called at my office January 7, 1911, for an examination, saying she thought she had appendicitis. Menstruations had been regular up until two weeks previous. Upon examination found nothing save slight tenderness in right ovarian region. I advised the patient to rest, keep bowels open and report back in two weeks, when I found her very nervous and upon examination found a tumor in the right side, neighborhood of ovarian tube and from history I suspected pyosalpinx or low suppurative appendicitis. Advised patient to remain in hospital and be operated on immediately. This she refused to do, saying her parents never would consent, and returned to her home. I heard nothing more from her for three weeks, when I was called very hastily to her home in the country, where I found her with temperature 105, pulse 150, abdomen distended to almost bursting point, having taken suddenly with a severe attack of what she supposed was colic a week previous, and had been under morphine since, taking as much as two and one-half grains in a night. There was a dulness all over the lower abdomen and a considerable amount of pressure upon the rectum and bladder, and every evidence of pelvis and abdomen full of pus—patient was unable to lie down and was sitting propped up in bed. By continuing application of hot turpentine stupes, internal administrations of salol tablets, and morphine, hypodermically, in sufficient quantities to relieve pain and high saline enemas. She remained in this condition for about two weeks, when she gradually began to improve for about two weeks more, when she suddenly took worse again and was brought to my place in an unconscious condition. After keeping her over night upon examination the outlines of an immense irregular shaped mass filling the pelvis, pushing well down Culdue's cul-de-sac, extending as high up on the right side as the umbilicus. As a last resort chloroform was administered and preparations were made to open up through cul de-sac and to drain off what was supposed to be pus. After the anæsthesia was administered a more thorough examination could be made. Still having some doubt as to what we might find, an exploratory needle was introduced and clotted blood was found, and diagnosis was confirmed of extra-uterine pregnancy. Abdomen opened immediately and a living child removed; the placenta and sac was attached to a greater part of the omentum. After dissecting and tying off sac, tube and ovary on the right side and I might say gallons of blood clots and pus removed. The intestine was thoroughly washed with normal salt solution and drained superpubic, and after six weeks she returned home, having gained many pounds and has been strong and healthy ever since. I have the two specimens here in evidence.

Strongyloides Infection.

Gage, of New Orleans, in a paper on "Infection of Strongyloides Intestinalis," writes that opinions differ as to the value of treatment.

Eustis reports a cure and attributes his success in part to the soluble diet given. On the other hand, Cline treated a patient for several months and, while the number of larvae diminished, they did not disappear entirely. His patient received the following treatment: large doses of thymol preceded by a 24-hour fast, one dose per week for six weeks; bismuth-beta naphthol daily for six weeks; except on the days thymol was administered; male-fern for two days in succession each week for six weeks; large doses of calomel and santonin for three days, followed by castor oil for three weeks. In addition he took at different times phenyl salicylate (salol) and castor oil equal parts, 60 cg , three times a day; mineral acids, iron and strychnine. Regulation of diet accompanied this treatment.

The ipecac treatment, as used in amebic dysentery, was tried in one case by Simon, of New Orleans, but was not effective. In none of the author's cases was treatment administered. Since the infection is so common it is worth while trying various drugs in the hope that an effective one may be found.

Reinfection easily accounts for the failure to get rid of the parasites. Larvae which had penetrated the intestinal walls would not be affected by an anthelmintic, and on again reaching the intestines would develop into adults, so in a short time larvae would appear in the stools even though all the adults were killed at the time the anthelmintic was administered. The treatment is comparable to that for malaria; it should be repeated at intervals for a long time in order to kill those parasites which were beyond the reach of any single course of treatment.—Archives of Int. Med.

Danger Due to Substitution.

Hardly another of all the preparations in existence offers a wider scope to imposition under the plea of "just as good" than the scientifically standardized Eucalyptol.

The most recent fraud practiced in regard to this product is an attempt to profit by the renown of Sander & Sons. In order to foist upon the unwary a crude oil, that had proved njurious upon application, the firm names of Sander & Sons is illicitly appropriated, the make-up of their goods imitated, and finally the medical reports commenting on the merits of their excellent preparation are made use of to give the desired lustre to the intended deceit.

This fraud, which was exposed at an action tried before the Supreme court of Victoria at Melbourne, and others reported before in the medical literature, show that every physican should see that his patient gets exactly what he prescribed. No "just as good" allowed.

Transplantation of Segment of Small Intestine to Repair Resected Sigmoid Flexure.

In the case cited, W. S. Fenwick did a colotomy for cancer of the sigmoid. Three months afterward he resected the growth and did the following transplantation: A loop of ileum fairly low down was taken and a portion about 5 inches in length was double clamped off. The bowel was divided between the clamps and the mesentery, with great caution to avoid blood-vessels towards its root, for a distance of 2½ inches. The continuity of the small gut was next restored by uniting the cut ends in front of the mesentery of the freed segment. The segment of the small intestine, it was found, could easily be brought into excellent position between the cut ends of the large. It was decided to employ two Murphy buttons, no risk of leakage existing because the colotomy was above the proposed junctions. This was accordingly done and proved not very difficult. After the anastomoses were completed a few stitches were placed, drawing together the cut edges of the mesenteries to avoid the possibility of internal hernia. Finally, the abdomen was closed rapidly by interrupted fish-gut sutures, and a rubber tube, with some gauze packing, was inserted at the lower end of the incision. The whole operation, from first incision to the last stitch, occupied ninety minutes. There was little or no shock.

On the seventh day after the operation the Murphy buttons were found free, the upper in the colotomy, the lower in the rectum. Twenty days after the resection, an attempt was made to close the colotomy under local anesthesia (eucaine). This proved very difficult but was eventually effected. A normal motion was passed just over three weeks after the major operation. The bowels now move naturally every morning and the patient states that very little fecal matter comes through the fistula and then only when straining at stool. Throughout the rest of the day he suffers no inconvenience.—Brit. Med. Jour.

Ligation of Umbilical Cord.

Many deaths from umbilical hemorrhage are reported every year to the National Bureau of Vital Statistics, and a few extremely simple rules are given looking to the avoidance of this usually preventable and (unfortunately) frequently fatal accident:

1. The cord should not (in the absence of hemorrhage) be cut until pulsations have nearly ceased.

2. The cord should be gently but forcibly stripped from the baby's umbilicus toward the placenta past the site of ligature. The cord should then be flat and bloodless. Tieing a large knuckle of blood in the cord is frequently the source of pressure and consequent hemorrhage.

3. The cord should be neither too large nor too small. If too small, it will cut through its gelatinous tissues and cause hemorrhage. If too large, it will not knot properly, and thus cause hemorrhage. The best ligature is that made with coarse white spool thread, doubled, redoubled and twisted to the proper size. Silk suture material makes a poor ligature, as does catgut; tape is better, but not so good as the thread ligature.

4. The cord should be frequently inspected during the "physician's hour," that is, the hour immediately following the delivery. If, at the expiration of this hour, the cord is perfectly dry, with no signs of oozing, and if the ligature has been of the right size and properly applied, the probability of bleeding is most remote.

5. Oozing or blood loss, however slight, immediately demands prompt action, either by applying another ligature, or, this failing to control the hemorrhage, the umbilicus should be transfixed with a needle or transfixion pin and a figure 8 ligature applied. Relative slight blood loss in the new-born infant may prove fatal.—Memphis Medical Monthly.

Charlotte Medical Journal

Published Monthly.

EDWARD C. REGISTER, M. D., EDITOR

CHARLOTTE, N. C.

PREVENTIVE MEDICINE AND THE PHYSICIAN.

It has been said that the medical profession is the most altruistic body of men in the world today, because they are the only persons who are deliberately disseminating knowledge which tends directly to decrease their incomes. This is true of a great many physicians, and ought to be true of all; for the medical man who does not inform every patient he sees concerning the methods for preventing a return of the present trouble and avoiding others is not worthy of the name.

On the other hand, we, none of us, desire to be eliminated from the ranks of the profession because we can no longer earn a living in it; nor would the elimination of the profession work for the good of mankind at large. It is necessary for systematic progress that some men devote their lives to a study of the morbid processes in the human body and how to prevent and combat them.

Here, then, we face two propositions; to do our duty and die (professionally) or to fail in our duty and live. The answer lies neither the one way nor the other. Both of the obvious paths are closed to us; the one by the world-old law of self-preservation and the other by honor. What to do?

The only suggestion which presents itself to my mind is that the medical profession must lay its ear to the ground, and, having heard the rumble of the approaching era of preventive medicine, must begin, now, at once, to prepare the public mind for an entire change in the relations of doctor and patient.

Two methods for arranging the new order of things appear; either the physician must be retained by the year, on a salary, by the various families who desire to employ him, to keep them well, primarily, and to care for them when his efforts in that direction fail, or he must become a part of the machinery of government, appointed under the civil service laws, perhaps, and ministering to the needs of the community in the line of his work, freed from the carking worry of the wherewithal to keep himself and his family alive and comfortable.

This may sound chimerical to some, but I feel safe in saying that those who are observing the signs of the times with care will agree with me that the time for such considerations is rapidly approaching.

We may not see the day, but the generation to follow us will see it, and will utter our names with gratitude and praise if we have laid the foundations in the public mind for the erection of the new structure which must arise when the present abode of the medical profession is razed by the advancing tide of preventive medicine.

G. B. L.

REPORTING VENEREALS.

Utah has passed a law requiring her physicians to report venereal diseases. I have not seen the text, but presume that it applies to syphilis, gonorrhea and chancroid. It is an experiment whose outcome will be watched anxiously the world over. As to its desirability, no sanitarian, or scientist, or sociologist, or man of average education and intelligence, looking at things as they are with modern eyes and not through the smoke of medieval superstition, has the least doubt. By its thoroughly effective enforcement an end would be put to two of the greatest curses inflicted upon humanity.

These three venereal diseases have no right to exist, because they can easily be recognized, guarded against and cured. Ignorance alone, and carelessness, permit them to continue. If every syphilitic and gonorrheic were registered and compelled to forego such intercourse with others as might impart the disease to them, there would be little disposition on the part of the infected to neglect the treatment that would eradicate the disease.

The harm that they do is beyond computation. Syphilis is causative of many maladies; it is liable to show itself after many years' apparent freedom, in ataxia, convulsions, or other implications of the nervous tissues, the arteries, or other parts. It is transmitted to the innocent wife and the unborn child. The latter may be apparently free from the infection, and when it reaches adult life have its sight destroyed by interstitial keratitis.

Terrible as are the ravages of syphilis, those of gonorrhea are worse. Joe Price, whose untimely death we all deplore, once said that more than 90% of the operations he performed upon women for pelvic disease were the result of gonorrhea. Our asylums for the blind depend on gonorrhea for their chief supply of patients.

The frightful thing about it is that practically all these victims are innocent. We are leaving out of account those who contract the infection by unlawful sexual intercourse, and consider only those to whom the infection comes in other ways.

The man who has contracted genital venereal disease is punished thereby for his wrong. He is sometimes careless or indifferent about transmitting the disease to others, even doing this purposely sometimes as what appeals to him as a joke, or from the same motive that led the fox who lost his tail to recommend to his mates a similar mutilation. But very much more frequently he is himself ignorant of the injury he is doing, believing himself cured. We forget that it is only a few years since Neisser enabled us to recognize the gonococcus, and opened our eyes to the diagnosis of the maladies it occasions. Still more recently, Wassermann has enabled us to be sure about many syphilitic cases at which we only guessed before, and about a good many more we did not even so much as guess, or even suspect.

We do more than diagnose. With salvarsan and other forms of organic arsenic we probably poseess the means of extirpating syphilis, in a time so brief as to seem unbelievable to him who was taught by Fournier to require four years for its eradication—and the pessimist denied that it could be done in that time, or ever. Without salvarsan we have learned to cut the time to less than a year, by a better and more scientific use of the old remedies, mercury and iodine, reinforced by pilocarpine and other adjuvants. The complete cure of this infection in a reasonable time will render it much easier to manage these patients, and to keep them in line.

As to gonorrhea, many will deny the possibility of eradicating it, as they have denied the curability of syphilis. I am one of those who believe that gonorrhea in all its manifestations is as surely controlled by the sulphides as is syphilis by mercury. Although the gonococcus is a plant and not, like the germs of syphilis, trypanosomiasis and malaria, a protozoan, arsenic sulphide greatly enhances the curative influence of calcium sulphide. Saturation with these, maintained for two weeks, is an ordeal no coccus can withstand.

Despite the advantage afforded by modern treatment, of a rapid and radical cure, it is to be feared that there will be insuperable difficulties in the way of the enforcement of this Utah law. The shame of the thing will deter many from applying to any physician except one who is known to be "amenable to reason"—these things go about almost by telepathy—and can be induced by suitable persuasion to disregard the law. There may even be instances where the physician may feel himself justified in pleading the ancient privilege of guarding his patient's secrets from publicity. Whether it is, on the whole, better that a guilty husband should be protected and shielded, that he may continue to deceive his wife, we leave to the casuist—men can argue interminably on such topics and make no progress.

But if the doctor honestly obeys the law and the druggist doesn't, the rest of the venereal practice will fall to the druggist. Since he now gets most of the gonorrhea cases, and his ineffective treatment is the cause of most of the calamities resulting, the harm that will follow may be realized.

However, these western commonwealths have a way of meeting difficulties with swift and effective remedies, and if this should be the result of the present law, we may expect to see it followed by another, prohibiting the treatment of venereal diseases by druggists, under penalties. We will then find the man who contracts gonorrhea reported, and this, with the apprehension of publicity, will prove a powerful deterrent against illicit indulgence. That it will put a stop to this is idle to expect, unless one believes that by legislative enactment a new chapter may be written into the history of the human race.

The eyes of the world are on Utah. She has done a brave thing. She has dared assault vice in its stronghold. What will be the result? Has her executive the courage and the ability to enforce the law, to meet the difficulties it will surely entail, and so manage them as to administer the law successfully? If so, the older States will learn the lesson from their young sister.

W.

SIXTY-NINTH ANNUAL SESSION OF THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA.

The fifty-ninth annual meeting of the State Society will be held at Hendersonville, June 18, 19 and 20, 1912. Headquarters for the Society will be the St. John Hotel. Place of meeting the county court house.

There are a number of hotels and first class boarding houses in Hendersonville which will afford abundant accommodation for all. Other hotels than the St. John: The Wheeler Hotel, Kentucky Home, Blue Ridge Inn.

The Highland Club will be open to as many as wish to stop there.

There will be dancing at all the hotels each night. There are many places of interest near Hendersonville which can be reached by electric car and automobile.

OFFICERS:

President—A. A. Kent, M.D., Lenoir.

First Vice-President—J. P. Munroe, M.D., Charlotte.

Second Vice-President—W. P. Horton, M.D., North Wilkesboro.

Third Vice-President—J. G. Murphy,

M.D., Wilmington.

Secretary—D. A. Stanton, M.D., High Point.

Treasurer—H. D. Walker, M.D., Elizabeth City.

Essayist—R. N. Duffy, M.D., New Berne.

Orator—John H. Tucker, M.D., Charlotte.

CHAIRMEN OF SECTIONS.

Materia Medica and Therapeutics—Dr. W. S. Jordan, Fayetteville.

Diseases of Children—Dr. Paul H. Ringer, Asheville.

Pathology and Microscopy—Dr. William deB. MacNider, Chapel Hill.

Surgery—Dr. J. M. Parrott, Kinston.

State Medicine and Jurisprudence—Dr. W. S. Rankin, Raleigh.

Practice of Medicine—Dr. W. A. McPhaul, Lumberton.

Physiology and Chemistry—Dr. Robt. F. Lafferty, Charlotte.

Gynecology—Dr. L. D. Wharton, Smithfield.

Obstetrics—Dr. J. W. Neal, Monroe.

Railway Surgery—Dr. W. C. Bostic, Forest City.

COMMITTEE OF ARRANGEMENTS.

Dr. L. B. Morse, Hendersonville, chairman.

Dr. A. B. Drafts.

Dr. W. R. Kirk.

Dr. G. E. Dixon.

Dr. W. M. Lyda.

Dr. E. M. Salley.

The following is the program which will be carried out:

Opening session 10 a. m. June 18, 1912, in county court house. Invocation by Rev. A. L. Stafford.

Address of welcome—Mr. Raginald Wilcox, of Hendersonville.

Response to Address of Welcome—Dr. Chas. O'H. Laughinghouse, of Greenville.

Address on behalf of Henderson-Polk Medical Society—Dr. Arthur R. Guerard, Hendersonville.

The President's Address—"The Profession and The State," Dr. A. A. Kent, Lenoir.

Meeting place of House of Delegates—Ball room of the St. John Hotel.

First meeting of the House of Delegates will be Tuesday, 2 p. m., and will last only thirty minutes, just long enough to elect the nominating committee. Next meeting of House of Delegates will be Thursday morning at 9 a. m. to receive the report of the nominating committee. The election and all other business coming before the House of Delegates, including the consideration of the change of constitution, Thursday afternoon. 2:30, the House of Delegates will report to the general meeting.

ENTERTAINMENT.

The committee of arrangements has anticipated the pleasure of the members of the Society and arranged for a luncheon and smoker on Wednesday night after the annual essay and oration.

The report of the obituary committee will be Wednesday night, 8:30.

A bridge party for the ladies on Wednesday afternoon at 4 o'clock.

After corresponding with the railroad officials as to reduced rates the Secretary finds that the summer excursion rate is lower than certificate plan. In the purchase of transportation buy the summer excursion ticket and save yourself money and trouble.

Conjoint session of the State Board of Health with the State Society 12 m. Wednesday.

Any errors or additions to this program should be reported to the Secretary at once.

SECTION MATERIA MEDICA AND THERAPEUTICS.

Dr. Wm. S. Jordan, Chairman, Fayetteville.

1. "Causes and Results of Carelessness in Prescribing," by Dr. Wm. S. Jordan, chairman of section, Fayetteville.

Discussed by Dr. Thos. M. Jordan, Raleigh.

2. "A Plea for More Thorough Study of Materia Medica and Therapeutics," by Dr. J. W. Halford, Chalybeate Springs.

3. "Statistics of the Serum Treatment of Typhoid Fever," by Dr. S. Highsmith, Fayettevile.

Discussed by Dr. C. L. Pridgen, Raleigh.

4. "The Treatment of Amebic Dysentery," by Dr. Roscoe D. McMillan, Red Springs.

Discussed by Dr. R. P. Bay, Baltimore, Md., and Dr. Ernest S. Bullock, Wilmington.

5. "The Treatment of Syphilis," by Dr. C. O. Abernethy, Raleigh.

Discussed by Dr. A. J. Crowell, Charlotte.

6. "The Uses of Electricity in Medicine," by Dr. R. L. Pittman, Fayetteville.

Discussed by Dr. J. T. Wright, Salisbury.

7. "Acute Rheumatic Fever with Endocardial Complication and Its Treatment," by Dr. Wm. F. Mitchell, Shelby.

Discussed by Dr. I. W. Faison, Charlotte.

SECTION PEDIATRICS.

Paul H. Ringer, M.D., Asheville, chairman.

Remarks by Dr. Ringer.

1. "The Problem of the School Child," by Dr. Chas. Roberson, Greensboro.

Respondent, Dr. Chas. S. Grayson, High Point.

2. "Amœbic Dysentery in Children," by Dr. J. V. McGougan, Fayetteville.

Respondent, Dr. J. F. Highsmith, Fayetteville.

3. "Adenoids in Infancy," by Dr. Lewis W. Elias, Biltmore.

Respondent, Dr. H. H. Briggs, Asheville.

4. "Influence of Public Health on Pediatrics," by Dr. Chas. O'H. Laughinghouse, Greenville.

Respondent, Dr. W. S. Rankin, Raleigh.

5. "Infant Stools in Health and Disease," by Dr. E. J. Wood, Wilmington.

Respondent, Dr. J. J. Phillips, Tarboro.

SECTION OF PATHOLOGY AND MICROSCOPY.

Dr. Wm. deB. MacNider, chairman.

1. "A Study of the Renal Epithelium in Acute Experimental Nephritis and the Relation Which Exists Between the Epithelial Changes and the Total Output of Urine," by Dr. Wm. deB. MacNider, Chapel Hill.

2. "Angio Neurotic Hemorrhage from the Kidney," by Dr. R. L. Payne, Norfolk, Virginia.

Discussion opened by Dr. Wm. deB. MacNider, Chapel Hill.

3. "Pathology of Pericolitis Membrana and of the Ligamentum Nephrocolieum," by Dr. Addison G. Brenizer, Charlotte.

4. "The Pathology of Amebic Abscess," by Dr. Wm. Allen, Charlotte.

5. "A Report of Five Hundred Cases Treated with Anti-Rabic Virus at the State Laboratory of Hygiene," by Dr. C. A. Shore, Raleigh.

SECTION OF SURGERY.

1. "Surgery as a Last Resort—The Surgeon's Responsibility in Such Cases," by Dr. D. T. Tayloe, Washington, N. C.

Discussed by Dr. R. L. Gibbon, Charlotte.

2. "Hippocrates, Surgeon," by Dr. K. P. B. Bonner, Morehead City.

Discussed by Dr. J. Howell Way, Waynesville.

3. "Diseases of the Kidneys and Their Relation to Surgery," by Dr. J. F. Highsmith, Fayetteville.

Discussed by Dr. F. T. Meriwether, Asheville.

4. "Strangulated Hernia with Report of Cases," by Dr. J. H. Harrill, Snow Hill.

Discussed by Dr. R. O. Dees, Greensboro.

5. "Fright as a Factor in Shock," by Dr. Julian Baker, Tarboro.

Discussed by Dr. J. T. Burrus, High Point.

6. "Congenital Hemangiomata," by Dr. Henry Norris, Rutherfordton.

Discussed by Dr. Jack Nicholson, Washington, N. C.

"Tumors of the Face and Neck," by Dr. E. T. Dickinson, Wilson.

Discussed by Dr. H. T. Bahnson, Winston-Salem; and Dr. C. M. Strong, Charlotte.

8. "The Practical Use of Iodine in the Preparation of the Skin in Operative Cases," by Drs. D. W. and Ernest S. Bullock, Wilmington.

Discussed by Dr. R. L. Payne, Jr., Norfolk, Va.

9. "Drainage of an Infected Knee Joint Without Subsequent Ankylosis," by Dr. Harlan Shoemaker, Shelby.

Discussed by Dr. John A. Williams, Greensboro.

SECTION OF STATE MEDICINE.

Dr. W. S. Rankin, Secretary State Board of Health, chairman.

June 19th, 2:30 p. m.

1. "The Obligations of Citizens to Public Health,"—His Excellency, W. W. Kitchen, Governor of North Carolina.

2. "A National Department of Health: The Provision of the Owen Bill," by Dr. L. B. McBrayer, Health Officer, City of Asheville.

Discussion opened by Dr. Charles O'H. Laughinghouse, Greenville.

3. "The Opposition to a National Department of Health," by Dr. Cyrus Thompson, Jacksonville.

Discussion opened by Dr. John C. Rodman, Washington, N. C.

4. "Ideals and Methods in State Medicine," by Dr. W. S. Rankin, Secretary State Board of Health, Raleigh.

Discussion opened by Dr. J. Howell Way, President State Board of Health, Waynesville.

5. "The Responsibility of the County Medical Society for County Public Health," by Dr. A. Bascom Croom, Maxton.

Discussion opened by Dr. J. Vance McGougan, Fayetteville.

6. "The Medical Profession's Responsibility for the Use of Proprietary and Patent Medicines," by Dr. Lucius N. Glenn, County Superintendent of Health of Gaston County, Gastonia.

Discussion opened by Dr. J. H. Tucker, Charlotte.

7. "Three Decades in Medicine, a Retrospect and a Prophecy," by Dr. J. C. Walton, Richmond, Va.

SECTION PRACTICE OF MEDICINE.

Dr. W. A. McPhaul, chairman, Lumberton.

1. "Tuberculin Dosage, A Further Study

of the Value of a Ratio Method of Dosage Increase," by Dr. L. B. Morse, Hendersonville.

Discussion opened by Dr. W. L. Dunn, Asheville.

2. "Field Work in Tuberculosis," by Dr. Mary E. Lapham, Highlands.

3. "The Treatment of Pellagra," by Dr. E. H. Bowling, Durham.

Discussion opened by Dr. Joseph Graham, Durham.

4. "Fallacy of Polypharmacy in the Practice of Medicine," by Dr. Thurman D. Kitchin, Scotland Neck.

5. "Dementia-Præcox with Special Reference to the Pre-Dementia Stage," by Dr. Paul V. Anderson, Richmond, Va.

Discussion opened by Dr. R. S. Carroll, Asheville.

6. "The Feeble Minded from a Medical Standpoint," by Dr. Ira M. Hardy, Washington, N. C.

7. "Some Opservations on Tumors of the Brain with Report of Cases," by Dr. J. P. Munroe, Charlotte.

8. Dr. R. B. Hayes, Fayetteville, title not given.

9. "The Treatment of Tuberculosis," by Dr. C. A. Julian, Thomasville.

Discussion opened by Dr. M. L. Stevens, Asheville.

10. Dr. H. T. Pope, Lumberton, title not given.

11. "Some Suggestions for the General Practitioner," by Dr. E. G. Moore, Elm City.

12. "The Milk Supply and Preventable Diseases," by Dr. T. A. Mann, Durham.

13. "Foreign Bodies in the Larynx, Trachea and Bronchi," by Dr. A. M. Whisnant, Charlotte.

14. "The Life of the Physician," by Dr. N. B. Adams, Murphy.

SECTION CHEMISTRY AND PHYSIOLOGY.

Dr. R. H. Lafferty, chairman, Charlotte.

1. "The Importance of Chemistry and Physiology to the General Practitioner," by Dr. Robt. H. Lafferty, Charlotte.

2. "Principles of Dietetics and Nutrition," by Dr. I. C. Manning, Chapel Hill.

3. "The Pupil and Its Significance in Pulmonary Diseases," by Dr. C. N. Peeler, Charlotte.

4. "Acidosis," by Dr. Nicholson, Richlands.

5. "Noguchi's Cutaneous Reaction for Syphilis," by Dr. J. W. Squires, Charlotte.

SECTION GYNECOLOGY.

Dr. L. D. Wharton, chairman, Smithfield.

1. "Some Remarks on Cervical Lacerations," by Dr. G. M. Cooper, Clinton.

Discussion by Dr. G. F. Duncan, High Point.

2. "Uterine Hemorrhage Frequently Seen in Pellagra," by Dr. Charles H. Peele, Warrenton.

Discussion by Dr. M. P. Perry, Macon.

3. "Significance of Leucorrhea," by Dr. A. H. Rose, Smithfield.

Discussion by Dr. Geo. D. Vick, Selma.

4. "The Nervous Phenomena of Pelvic Diseases," by Dr. W. Hopton Smith, Goldsboro.

Discussion by Dr. H. G. Turner, Raleigh.

5. "Some Reflex Disturbances Resulting from Uterine Displacements; the Diagnosis and Treatment. Report of Case," by Dr. T. Marshall West, Fayetteville.

Discussion by Dr. Hubert A. Royster, Raleigh.

SECTION OBSTETRICS.

Dr. J. W. Neal, chairman, Monroe.

1. "Better Obstetrics," by Dr. J. W. Neal, Monroe.

2. "An Interesting Case of Hyperemesis Gravidarum," by Dr. Albert D. Parrott, Kinston.

3. "Notes from a General Practitioner's Records," by Dr. J. R. Paddison, Oak Ridge.

4. "Caesarean Section," by Dr. J. T. Burrus, High Point

5. "Placenta Previa," by Dr. Sam A. Glenn, Monroe.

6. "The Frequency of Appendicitis During Pregnancy; Necessity for Operation. Report of Case," by Dr. John Q. Myers, Charlotte.

7. "Essentials in the Successful Practice of Obstetrics," by Dr. G. L. Brown, Hendersonville.

8. "Obstetric Antisepsis," by Dr. R. L. Payne, Monroe.

9. Dr. J. L. Egerton, Hendersonville, subject to be announced.

10. Dr. M. Adams, Statesville, subject to be announced.

11. "Report of a Case of Appendicitis Complicating Pregnancy, Labor and Puerperium," by Dr. H. McKee Tucker, Raleigh.

RAILWAY SURGERY.

Dr. W. C. Bostic, chairman, Forest City.

1. "Field Surgery," by Dr. W. C. Bostic.

2. Dr. J. R. Rodgers, Raleigh. Subject not announced.

3. Dr. J. Harrison, Jr., London, Tenn. Subject not announced.

The Hospital for Nervous Diseases.

It will be of interest to the readers of this Journal to know that a large modern hospital of about fifty rooms solely for nervous diseases is being opened in Atlanta. The building is located two blocks off the car line overlooking the most attractive part of Grant Park, and is ideally situated for the care of nervous invalids.

This sanitarium is called "the Hospital for Nervous Diseases; and has the following well-known Atlanta physicians upon the staff: Dr. Hansell Crenshaw, Medical Director; Dr. C. W. Strickler, Internal Medicine; Dr. F. K. Boland, Surgery; Dr. J. E. Paullin, Pathology; Dr. G. M. Niles, Gastro-enterology; Drs. Campbell and Ridley, Laryngology and Rhinology; Dr. Park Howell, Opthalmology. Dr. Bernard Wolff, Dermatology; Dr. Edgar Ballenger, Andrology; Dr. C. R. Andrews, Orthopedics; Dr. W. F. Shallenberger and Dr Annie L. Sawyer, Gynecology.

Book Notices.

Common Disorders and Diseases of Childhood. By George Frederic Still, M.A., M.D., (Cantab.), F.R.C.P., (London), Professor of Diseases of Children, King's College, London; Physician for Diseases of Children, King's College Hospital; Physician to the Hospital for Sick Children, Great Ormond Street; Honorary Member of the American Pediatric Society. Second Edition. London: Henry Frowe, Oxford University Press; Hodder & Stoughton, Warwick Square, E. C. 1912.

The original plan of the author of this volume was to publish the lectures delivered at King's College Hospital and at the Hospital for Sick Children, Great Ormond Street, but when he found that the lectures were not connected he thought it wise to include other clinical studies.

In this, the second edition of this work Dr. Still has made many improvements. He has followed the same plan as that of his former edition, but in this one he deals with several disorders which were not mentioned in the first edition, amongst which may be mentioned enlarged tonsils and adenoid hypertrophy, epilepsy, asthma and hydrocephalus.

The rapid progress of scientific investigation has necessitated, even since this book was first published barely two years ago, considerable modification of views on some diseases of children, for instance, infantile paralysis and congenital syphilis. Other alterations and additions have been made wherever such changes seemed likely to be of value, and to our mind the work has in every way been greatly improved upon.

The book contains 813 pages of reading matter, is substantially bound, and in every way it is an up-to-date volume.

The Care of the Insane and Hospital Management. By Charles Whitney Page, M.D.. Assistant Physician Hartford Retreat, Hartford, Conn., 1871 to 1872 and 1873 to 1888; Superintendent Connect cut Hospital for the Insane, Middletown, 1898 to 1901; Superintendent Danvers State Hospital, Danvers, Mass., 1888 to 1898 and 1903 to 1910; Member of the American Medico-Psychological Association; the Boston Society of Psychiatry and Neurology; The New England Psychiatric Society; The Massachusetts Medical Society. Boston: W. M. Leonard, Publisher. 1912.

This book is full of useful instruction to the medical profession. It gives in a minute form valuable suggestions concerning the proper attendants for insane people, such as hospital trustees, superintendents, assistant physicians, nurses, etc.

The volume, while small, is in every way up-to-date. It is well bound and carefully indexed. We are glad of an opportunity to recommend it to our readers as a guide in the care of insane patients.

A Compend of Human Physiology, Especially Adapted for the Use of Medical Students. By Albert P. Brubaker, A.M., M.D., Author of "A Text-book of Physiology"; Professor of Physiology and Medical Jurisprudence in the Jefferson Medical College; Formerly Professor of Physiology in the Pennsylvania College of Dental Surgery; Lecturer on Anatomy and Physiology in the Drexel Institute of Art, Science, and Industry; Fellow of the College of Physicians of Philadelphia. Thirteenth Edition with 36 Illustrations. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. 1912.

In the preparation of the thirteenth edition of this work an opportunity has been furnished for the revision of many paragraphs, and for the addition of such new material as seemed necessary for the needs of students during their attendance on lectures and for reviewing the subject prior to their examinations.

The work is condensed into a very small amount of space, but it is full of valuable information for medical students and practitioners.

The Practical Medicine Series, Comprising ten Volumes on the Year's Progress in Medicine and Surgery. Under the general editorial charge of Gustavus P. Head, M.D., Professor of Laryngology and Rhinology, Chicago Post-Graduate Medical School. Charles L. Mix, A.M., M.D., Professor of Physical Diagnosis in the Northwestern University Medical School.

Volume I. General Medicine. Edited by Frank Billings, M.S., M.D., Head of the Medical Department and Dean of the Faculty of Rush Medical College, Chicago, and J. H. Salisbury, A.M., M.D., Professor of Medicine, Chicago Clinical School. Series 1912. Chicago: The Year Book Publishers, 180 N. Dearborn Street.

This is the first of the 1912 series of books which are published at about monthly intervals throughout the year by The Year Book Publishers. The work is intended for the general practitioner, yet is divided into different volumes concerning different subjects, and of course if a specialist so desires he can obtain just the volumes he wishes to use.

This is the General Medicine volume that wo have before us, and it is thoroughly complete, and is worthy a place in any medical library.

Its illustrations are beyond the ordinary. Its binding and mechanical work is both neat and attractive.

Price $1.50.

The Practical Medicine Series, Comprising ten Volumes on the Year's Progress in Medicine and Surgery. Under the general editorial charge of Gustavus P. Head, M.D., Professor of Laryngology and Rhinology, Chicago Post-Graduate Medical School. Charles L. Mix, A.M., M.D., Professor of Physical Diagnosis in the Northwestern University Medical School. Volume II. General Surgery. Edited by John B. Murphy, A.M., M.D., LL.D., Professor of Surgery in the Northwestern University; Attending Surgeon and Chief of Staff of Mercy Hospital, St. Joseph's Hospital and Columbus Hospital; Consulting Surgeon to Cook County Hospital and Alexian Brothers Hospital, Chicago, Ill. Series 1912. Chicago: The Year Book Publishers, 180 N. Dearborn Street.

This, the second volume of the 1912 series of Practical Medicine, gives a condensed but thorough treatise on General Surgery. These books which are published monthly are always kept right up to the present standards of scientific investigation. They are thoroughly complete, and this one we consider especially valuable. The price of this volume is $2.00. Price of series of ten volumes $10.00.

The Fourth Annual Report of the Commissioner of Health of the Commonwealth of Pennsylvania, 1909. Part I and Part II. Harrisburg: C. E. Pugh, Printer to the State of Pennsylvania. 1911.

This report is bound in two attractive volumes of about the same size. They are carefully indexed, and contain an unusual amount of interesting statistics, and valuable instruction concerning our most common diseases.

The New Pocket Medical Formulary with an Appendix Containing Formulae and Doses for Hypodermic Medication; Posological Table; Weights and Measures; Fractures, Dislocations and Sprains; Ligations of Arteries; Hemorrhages and Wounds; Poisons and Antidotes; Miscellaneous Emergencies; Tables of Differential Diagnosis; Diet Lists for Various Diseases; Formulae for Fluid Foods, etc. By William Edward Fitch, M.D., Editor of Pediatrics, Adjunct Attending Gynecologist Philanthropian Hospital; Assistant Attending Gynecologist Presbyterian Hospital Dispensary; Attending Physician to the Vanderbilt Clinic, College of Physisians and Surgeons, New York City, etc.

This is one of the most carefully prepared and authoritative works of the kind extant. It embraces all the points of superiority in other formulaes, and in addition many valuable features, some of them entirely novel. A point worthy of special mention is the clinical hints following the headings of the more important diseased conditions. The double system of cross indexing facilitating rapid reference to other sections having a corresponding relation to the disorder under consideration is another valuable point. The extensive tables of differential diagnosis of maladies easily confounded is another unique and exceedingly valuable feature. The diet lists for disease conditions are unusually complete and form another exceedingly valuable feature of the work.

To the student and younger practitioner this little book will be found especially helpful over many hard places. Its frequent consultation will stimulate in the young practitioner the habit of prescribing pharmacopeial preparations rather than writing for proprietary substances of unknown composition. The methods of treatment are in accordance with the most advanced and up-to-date practice. In fact, this little book of 500 pages on specially thin made opaque paper, bound in elegant flexible leather, may be correctly termed a pocket practice of medicine for every day use, and can be conscientiously and heartily commended to every progressive practitioner.

Abstracts of the Leading articles of the month.

Treatment of Epilepsy.—Schnitzer (Zeits f. Neurol. u. Psychiatrie) discusses the treatment of epileptic attacks under four headings: (1) Hygienic, dietetic, physical and electrical. (2) Organ extracts and serum therapy. (3) Drugs. (4) Surgical intervention. There are few new ideas. He favors the bromide treatment. He usually commences with daily doses of 2 gr. in children and 3 gr. in adults and gradually increases to the point of tolerance. As a rule, cases which do not yield to 6 gr. will resist higher doses. The Dr. refers to Balint's modified method of the French investigators, which consists of reducing salt to 2 gr. a day and administering 3 gr. bromide daily. The writer adopted this treatment, which produced transient effects, in some of his patients. Flechsig's treatment —opium and bromide—is to be used as a last resort. The patient usually receives 0.05 gr. of ext. opii three times a day for six weeks, gradually increasing to 1.0 gr.; then the opium is suddenly withdrawn and followed by bromide, 6 to 8 gr. a day for the ensuing six weeks. The author also speaks of other drugs, such as borax, epileptol, sabromine, digitalis, etc. In cases where there are definite irritating foci to account for the seizure, surgical intervention should be resorted to. Operative procedures for non-focal epilepsies are of no avail, although favorable results are reported in literature.

Application of Tincture of Iodin to the Peritoneum for Tuberculous Peritonitis. Hofmann (Munch. med. Woch.) says that painting the normal peritoneum with tincture of iodin produces a strong rèaction, as shown in animal experiments by profuse transudation and adhesion. In tuberculous peritonitis the chief way in which nature effects a cure consists in hyperemia, transudation and adhesions. Simple laparotomy in this disease will alone sometimes cause hyperemia of the peritoneum, and so will hot air and the x-ray. None of these means, however, will cause so marked a degree of hyperemia as tincture of iodin. If a coil of intestine is painted with it, it speedily loses its lustre and becomes brown, but this coloration soon yields to a diffuse redness. In the dry form of peritoneal tuberculosis the application of the tincture sometimes produces a serous transudation in a few hours with subsequent formation of adhesions. While these are to be dreaded in case of normal intestine, the author regards them as harmless in tuberculous peritonitis for the reason that the curative process in this disease is always accompanied by their extensive formation. From experiments on animals and observations on patients laparotomized for tuberculous peritonitis the author felt encouraged to try applications of iodin to the parietal and visceral layers of the peritoneum in this disease with the result that the period of cure was considerably shortened. He reports four cases, in all of which recovery rapidly occurred under this treatment. The application was regularly followed even within the first forty-eight hours by a chemotactic peritonitis without any fever of tympanites, but these symptoms of irritation speedily subsided. The entire time of treatment averaged four weeks, while in cases treated in the customary way months may elapse before complete recovery occurs.

Autogenous Vaccines in Pyorrhoea Alveolaris.—Best (Dublin Journal Medical Science) says that the nature of and effects produced by pyorrhœa alveolaris are discussed. The most satisfactory method of treatment is the injection of a vaccine prepared from the patient's own organisms. As a rule only small quantities should be injected at first, and the opsonic index should be estimated in the intervals in order to determine, firstly, whether the doses are being given in suitable quantity; and secondly, that the next dose may be given at the proper time. Local treatment should not be forgotten. Among the most efficient local treatments are the application of iodine to the gums, and the frequent washing out of the pockets of pus with hydrogen peroxide by means of a fine-nozzled syringe. Carious teeth should be removed.

Results of Prostatectomy.—Proust (Trans. Internat. Urol. Congress, London) calls attention to certain recently established anatomical data on so-called "hypertrophy of the prostate," emphasizing the fact that the researches of anatomists show the lesion to be an adenoma of the submucous, juxta cervical glands. The Dr. says that the post-functional results and the permanency of cure depend on the complete enucleation of the adenoma.

Impotence is one of the most frequent sequelæ of prostatectomy, and excepting Young's results, it seems to be a very common consequence of the perineal operation. Rafin thinks this complication does not occur in young and well-preserved patients. Of 75 cases operated on, 6 retained their potency, 22 lost it, and the rest of the cases were not followed. Of the 52 cases reported by Albarran as having erections prior to operation, this was preserved after the operation in 12; 16 had diminished potence, and 24 became impotent. Castano, Legueu and Tuffier consider impotence almost certain after perineal prostatectomy. According to Albarran the loss of this power may be looked upon as the result of the destruction of an erectogenous zone at the point where the ejaculatory ducts join; or simply a lesion of the nervous centripetal channels of the reflex paths of erection. In suprapubic prostatectomy the ejaculatory ducts and the vas are preserved more often than in the perineal operation. According to Dominicus, impotence is due to the destruction of the gland which he considers contains the active chemical agent, determining sexual impulses.

Qrchitis developed in from 10 to 30 per cent. of the cases operated by the perineal route; but only in 1 per cent. after suprapubic operation. In a compilation of 2838 prostatectomies, Desnos found the two chief complications to be incontinence of urine and formation of fistulae. Permanent incontinence is rare, and is mainly due to a direct lesion of the membranous urethra; incontinence following suprapubic operations is not as frequent as that following perineal prostatectomy. Still it is not exceptional, for it occurred 11 times in 1573 suprapubic prostatectomies.

There are two varieties of fistulae which may complicate perineal prostatectomy, rectal and urethral. The rectal fistulae are due to injury of the rectal wall, which, in the majority of cases, takes place at the time of operation. Some fistulae have been caused by pressure necrosis from drainage tubes. The recto-urethral fistulae often takes months to heal, but permanent urethral perineal fistulae are infrequent.

The percentages of complications following prostatectomy, fistula, incontinence, and stricture, is low enough to have but little influence on the value of ultimate results, all the more so, since the majority of these complications are temporary, or yield readily to treatment. Stricture formation occurred but 3 times in 642 cases (Freyer). In another series cited by the author it occurred 6 times in 292 cases. The result of perineal prostatectomy in cases of chronic complete retention and recent complete retention are good, but in cases with chronic incomplete retention are very often unsatisfactory. Suprapubic prostatectomy gives better results for all varieties of retention, and is regarded by the author as being on the whole superior to the perineal operation.

Intravenous Narcosis.—Burkhardt (Munchener Med. Wochenschr.) gives his experience of intravenous narcosis which includes over 250 cases. Blood changes were never remarked. Even in a case of acute sepsis, and in one of acute perforative peritonitis with a temperature of 40°C. (104°F.), intravenous narcosis by means of ether produces neither blood change nor yet haemoglobinuria, both of which have been observed by other workerf. It is, however, inadvisable to employ this method in cases presenting severe nephritis, or in which waxy disease of the kidney exists. The rectal temperature is slightly, if at all. reduced after narcosis has been produced. There was observed a slight rise in the blood pressure in some cases, but immediately after the narcosis this returns once more to its normal condition. He stated that this form of narcosis has only a favorable effect upon the blood pressure. On the other hand caution is necessary in cases of arteriosclerosis with abnormally high blood pressure. The Dr. says that such remedies as urethane, hedonal, chloral hydrate, isopral, veronal, and chloralamide, are unsuitable for the intravenous production of narcosis. He has successfully employed a mixture of ether and hedonal. The solution consisted of 5 per cent. ether, and 0.5 per cent. hedonal. The writer combined intravenous ether and isopral narcosis in some 70 cases. The results were so favorable that he now prefers this form to all others. Intravenous narcosis in his hands has proved most successful, provided it is used in suitable cases and the proper technique is followed. The Dr. has never observed any bad effects produced, although in one or two cases death has resulted (though not from the effects of the narcotic). As with every other method of anaesthesia, the method of intravenous narcosis must be thoroughly learned and practiced if we wish to attain to good results in its use. Ether is undoubtedly best for this purpose. It produces no unfavorable influence on the blood pressure, but rather raises it when it has been previously reduced below the normal. Contraindications are myocardial degeneration, severe arteriosclerosis, nephritis, severe jaundice, cholaemia, venous congestion, and general plethora. It is specially indicated in conditions of collapse, loss of blood, cachexia, conditions of exhaustion, respiratory disturbances, and peritonitis. Further it is indicated in operations on the head and neck, especially in the cavities of the mouth and throat. In children it is of special service in performing the operation of staphylorrhaphy.

Urethroscopic Findings in Spermatorrhea and Prostatorrhea.—Scheuer (Med. Klinik) describes the urethroscopic pictures obtained with the Goldschmidt urethroscope, in cases of defecation and micturition spermatorrhea, due to masturbation, coitus interruptus, and gonorrhea. In cases of spermatorrhea with ejaculatio precox, the openings of the ejaculatory ducts were found gaping. In three cases following gonorrhea the patulous ejaculatory ducts were opened into a large fissure in the colliculus. The same pathological condition was noted in cases giving a history of excessive coitus interruptus, or masturbation. The gaping condition of the orifices of the ejaculatory ducts in cases following gonorrhea is due to an infiltrative process in the neighborhood of the ducts, or to an involvement of the walls of the ducts that gives them rigidity. The indurated patulous ducts fail to close the visicles properly, and so spermatorrhea arises.

The cases of prostatorrhea under consideration occurred in patients with chronic prostatitis. The orifices of the prostatic ducts too were found patulous. Prostatorrhea does not seem to be frequently associated with chronic prostatitis, for the condition was met with but 7 times in 65 cases. Prostatorrhea may be attributed to atony of the prostatic ducts. It is occasionally seen following gonorrhea which has involved the prostatic ducts but not necessarily the prostate gland itself. The walls of the ducts become indurated and the orifices gape, thus giving free vent to the prostatic secretion.

How Recurrences after Gallstone Operations May be Avoided or Diminished.—Kehr (Muench. med. Wochensch.) says: 1. The physician should refer his cases to the surgeon at an early period and not wait until an operation is no longer able to completely remove the inflammation and restore favorable conditions for the outflow of secretion. 2. The surgeon should operate thoroughly. He should restrict the indications for cholecystotomy as much as possible, and replace choledochotomy with suture by cholecystectomy with drainage of the hepatic duct. The tamponade and drainage should be so arranged that irrigation of the duct, hepaticus and choledochus is still possible at the end of fourteen days. It is necessary to remember that the leaving behind of stones in the cystic duct and more frequently in the choledochus is often the result of a faulty technic in disposal of the stump after cystectomy, the exposure of the hepatic duct and choledochus, and the method of tamponade. Many so-called recurrences may be avoided if greater attention is paid to the details of the technic, as, for instance, the shape and size of the drainage tubes. 3. It is unfortunate that some physicians are still unaware that even in cases of stones in the choledochus (33 per cent. of all cases) icterus is absent, and this should lead the surgeon to inspect the bile passages and to probe or incise them in every cholecystectomy. Operations should not be confined to the gallbladder, but be extended to the ductus choledochus. A simple cystectomy is permissible only in exceptional cases. 4. To prevent false recurrences which may be attributable not only to the biliary passages but to accompanying disease of other organs, it is essential in every gallstone operation to inspect and palpate the duodenum, pylorus, pancreas, appendix vermiformis, and where indications call for it, to at once resort to gastroenterostomy, hepatopexy, appendectomy, etc. To obtain permanent results after gallstone operations a sufficiently large abdominal incision should be made. Notwithstanding the most thorough operation, however, recurrences have to be reckoned with in about 10 per cent. of cases. The true recurrences of which so much is said occupy a subordinate place, and chiefly follow conservative methods, while they are practically absent after cystectomies and drainage of the hepatic duct.

Nervous Vomiting in Childhood.—Smith, in The London Lancet, mentions a type of nervous vomiting occurring in children about the age of the second detention, which has received but little attention in modern text-books, is not uncommonly seen in the out-patient department of a children's hospital and is not infrequently overlooked. It is not periodic, but is of a persistent character; often, when untreated or when treated unsuccessfully, it may continue for many weeks. It occurs during a meal, or more usually directly the meal is finished, and is of frequent, if not of daily, occurrence. It is painless and effortless and neither preceded by any organic disturbance nor followed by any ill-effects. No diet, no ordinary gastric sedatives, appear to influence it. But with all this, and this is a feature to which Smith draws special attention, the child seems neither to lose weight nor to suffer in any respect an alteration in its general appearance of well-being. This nervous phenomenon, however, while apparently inducing little or no change in the general health of the child, creates a great deal of distress in the minds of the relatives concerned and generally reflects very little credit on the therapeutics of the practitioner who fails to recognize ts real nature. On the other hand, when diagnosed, a very simple remedy suffices in most instances to effect a cure. Observation of both parent and child is often of value. The mother is frequently of a neurotic temperament, one who suffers from headaches and backaches and has little or no control over her offspring. The child, sometimes thin, sometimes well-nourished, is frequently of a reserved and introspective nature. Occasionally the child is emotional and highly timid, one who cries on being undressed, or struggles and shrinks from any examination that involves a stethoscope or spatula. A review of the histories of these cases generally discloses the .presence of other functional nervous disorders, such as enuresis, migraine and habit spasm; or in some cases a rheumatic diathesis. The treatment resolves itself into an elimination of all causes that may aggravate the underlying nervous instability. Removal from unsuitable home surroundings and the application of a little ffrm moral control will often effect a cure. In obstinate cases the same treatment as is applicable to lienteric diarrhea, namely, small doses of arsenic and opium given just before meals, has, in the author's experience, always proved immediately efficacious.

Mucous Colitis and Spastic Constipation.

Discussing the diagnosis and treatment of these associated conditions, the author states that it is generally easy to examine the colon from the cecum to the hepatic angle, as well as the descending colon. The transverse colon can only be defined when it is either contracted or filled with feces. In examining for it two methods are useful: (1) That of Glenard, which consists in carefully placing the soft part of the four fingers of both hands midway between the umbilicus and ensiform cartilage and pressing them downward toward the umbilicus, when the contracted colon can be felt to give the sensation of a tense cord; (2) grasping the trunk with the two hands and palpating with the thumbs, to ascertain whether there are retained feces. The pelvic colon can only be satisfactorily examined per rectum or bimanually. A useful test for coprostasis is to give a large quantity of charcoal before a meal. Normally it will be discharged in twenty-four hours. In some cases it will be from forty-eight hours to several days before it appears, even though there is a satisfactory daily action; on the other hand, it may not cease to blacken the feces for several days. If enough charcoal be given, a means is thus afforded of ascertaining whether there is merely delay in the bowel function or whether there are probably pouches over which the main current passes.

In the treatment, whenever there is either weakness or want of tone of the abdominal muscles, even without visceroptosis, it is necessary to prescribe an elastic belt, supporting the abdomen immediately above the pubes; this should be combined with exercises. A belt is especially necessary in the obese. When systematic dieting is being carried out nothing but a thorough daily evacuation is of any use; to know whether it is complete the charcoal test or an examination of the product of a water enema may be employed, and further information is obtainable by urinary analysis.

Where the feces are too dry, salines, with or without agar-agar or regulin, give the best results. The author has repeatedly verified Glenard's observation that a saline draught in cases of insomnia during the early morning hours will often bring on sleep. Where energetic means are used to cause evacuation of irritating and spasm-producing materials—inspissated mucus, membranes, sandy material, etc.,—in mucous colitis, the slow and painful passage of these substances will give trouble for four or five days. Oxgall pills should always be given when there is pain, as they help dissolve adherent, coagulated mucus. Oil enemata are indispensable, facilitating progress of the material in the bowel.

Cellulose in the diet, when it does not cause even greater discomfort from flatus, undoubtedly helps to prevent accumulations, but discretion is required in its use. Agar-agar should always be tried in these circumstances, but only so long as it is looked on as a material which may usefully replace vegetable fiber.—Hubert Higgins, The London Practitioner.

Vulvitis in Newly Married Women.

Audrey finds that simple forms of vulvitis are common among persons lately married, and that while giving rise to unpleasantness and discomfort, they tend to be confused with other varieties of the disease. This form of the malady is accompanied by a more or less copious discharge with pain during a week or ten days, and at the same time intercourse is painful. The trouble is sometimes associated with a contraction of the levator ani, in which case genuine vaginismus is present. Pain at the time of connection may be due to a laceration of the hymen or to abrasions of the dilated vaginal orifice. As a rule cystitis is present, with frequency of micturition and discomfort. The symptoms and pain complained of by these patients are very variable, but they are also transitory, and their fears can be readily appeased. A local examination shows a superficial vulvitis involving the lower third of the vagina, the fourchette, the sides of the vulva, and the orifices of the Bartholinian glands. These parts are often infected and may show ecchymoses or even erosion; there is no pus to be seen. The treatment should include warm boric injections into the vagina daily, and thrice during the day the part should be cleansed with a small pad of cotton-wool soaked in a mild disinfectant solution. If the malady does not yield to the above treatment, a solution of zinc sulphate or an application of protargol is advisable. The complaint may be regarded as almost physiological, but in nervous people may be the starting-point of neuralgic or other trouble; it therefore merits careful attention.—Brit. Med. Jour.

Indications for the Karrell Milk Cure.

The Karrell diet depends for its effect chiefly upon the small amount of fluid and of salt introduced into the system. According to the original direction, only 800 to 1,000 Cc. milk are allowed daily for five to six days. The patients rarely complain of thirst, and the loss of weight which is apt to occur is of little importance. If a diuretic effect is not obtained, the patient may receive more sustaining food for a few days and the cure may then be repeated in combination with digitalis and diuretic drugs. In rare cases, the diuretic effect does not appear until the twelfth day. The indications for the use of the Karrell cure, according to W. His, are as follows:

1. Cardiac disturbances of obesity. Unless the heart is very weak, these patients need not remain in bed. The cure should not be continued too long since these patients are accustomed to targe meals.
2. Emphysema and chronic bronchitis with failing right heart. The dyspnea usually disappears after a few days.
3. Cardiac asthma with degeneration of the myocardium. The effect is often surprising, especially in cases where heart tonics and narcotics have brought little relief. The duration of treatment here is generally one week.
4. True angina pectoris, especially the milder grades, with slight but frequent attacks. The best results are seen in plethoric individuals with tendency to meteorism and flatulency. In many of these cases, drugs, such as the iodides, nitrites, vasotonin are necessary in combination with cardiac massage and gymnastics.
5. Renal insufficiency, especially with weakening heart, uremic dyspnea and threatening uremia.
6. Valvular lesions are an indication only when the heart muscle shows signs of insufficiency.
7. Obstinate serous exudates, especially of the pleura and the pericardium. According to some authors, tuberculous ascites is also an indication.
8. In combination with digitalis, whereever this drug is indicated.—Therap. Monatshefte.

Treatment of Acute Iritis.

In the treatment of acute iritis, N. Bishop Harman writes that atropine should be administered as a first step to fold back the iris and dilate the pupil. He recommends that an ointment of the atropine sulphate combined with cocaine hydrochloride, 2 per cent. each in equal parts of lanolin and petrolatum be prepared and a small piece placed below the lower lid every hour for the first four hours, and then every two hours until the pupil is widely dilated. Later, the strength and frequency of the application may be reduced to 1 per cent. night and morning. The author also recommends the applications of relays of hot fomentations to reduce the pain. In the worst cases, the region of the eye may be blanched by withdrawing blood by leeches applied to the outer canthus in order to hasten the action of the atropine. The severity of the pain may be checked temporarily, at least, by instilling a 5 per cent. solution of dionin.

For indirect treatment, it is well to give a purge at the outset. The subjects of iritis nearly always have a foul breath, and are constipated. Any drug that will give a free and watery stool will do, and to aid this plenty of water should be given with and after the draught. Absolute rest in bed in a dark room should be insisted upon, and alcohol and tobacco made taboo. In any case of which the origin is indeterminate or pending its determination, an alterative is useful, and there is no better than mercury iodide—5 grn. of potassium iodide with a dram of the liquor of perchloride of mercury. If the case be syphilitic, it is first-rate treatment; if it be due to gonorrheal rheumatism, it is good—better than vaccine treatment; only if there be arthritis at the time, salicylates or acetosalicylic acid are better.—The London Lancet.

Chaulmoogra Oil in Leprosy.

Sandes writes that the chaulmoogra oil treatment, although slow and at best not very satisfactory, is still superior to any other remedy that we know. He emphasizes that the use of the oil must be prolonged, five years or more; it must be as far as possible continuous, and the imbibition of the oil should be pushed gradually to the extreme of receptivity. Relapses will undoubtedly occur, particularly in the earlier stages, but such should not be permitted to foster discouragement. To expect sudden amelioration is to look for disappointment. Surgical assistance should always be ready to intervene where natural processes or medical applications have failed in discarding devitalized tissues or opposing inflammation.--Jour. Trop. Med. and Hygiene.

Drugs in Rheumatic Conditions.--Stockman (London Practitioner) says that the practice is to give at frequent intervals as large doses of salicylates as can be conveniently tolerated, and this is justified by the fact that all salicylate compounds are rapidly excreted from the body by the kidneys, and further, that before excretion they are converted into an inert compound with glycocoll-salicyluric acid. Therefore, in order to have the drug circulating in the body fluids in an active condition the supply must be relatively large and frequently repeated. For the patient's comfort it is necessary to avoid the use of doses which are unnecessarily large, as they bring on the familiar symptoms of deafness and ringing in the ears, which may be taken in the majority of cases as a hint to reduce the amount.

Profuse perspirations and skin eruptions are other inconveniences which frequently follow the administration of salicylates. There is a very widely held idea that they also act as heart depressants, but this is not borne out by exact observations on the blood-pressure in man or by experiments on animals. They bring on a certain feeling of misery and depression in many people, but this is attributable to an action on the nervous system rather than on the circulation.

With larger doses such as are sometimes given with the idea of thoroughly destroying the infective germ, vomiting frequently occurs, and it is possible not only to seriously depress the nervous system, but to bring on a dangerous condition of lessened alkalinity of the blood—"acidosis," as it is sometimes called. With the lessened alkalinity metabolism is upset, with the result that acetone appears in the urine and breath, while the patient becomes drowsy and lethargic or restless and delirious, and may suffer from disturbed respiration and "air-hunger." All this, except the vomiting, can be prevented, to some extent at least, by giving about twice the amount of sodium bicarbonate with each dose of sodium salicylate, and taking care at the same time to avoid the occurrence of constipation. As a rule, cases can be efficiently treated without the risks and anxiety consequent on such large doees. In an ordinary case of moderate severity 15 to 20 grains of sodium salicylate every three or four hours form a sufficient dose. With these amounts the pain in the joints and the temperature begins at once to be favorably affected, the former subsiding in from twelve to twenty-four hours, and the latter within forty-eight hours. The pulse and respiration fall with the temperature, and the joint effusion is absorbed in two or three days. The course of events resembles a crisis. Sometimes it is slower and resembles a lysis. If the temperature does not settle satisfactorily each dose may be increased, or one large additional dose of 40 to 60 grains may be given on one or on several days in succession. The administration should be kept up in the same or smaller quantity until the temperature has definitely settled to normal. If any relapse occur the salicylate should be at once increased. Additional absorption of salicylic acid may be brought about by applying a dressing of methyl salicylate on lint to the affected joints, and this has the further advantage of acting as a local anesthetic and soothing pain.

Both in adults and children the rheumatic infection may locate itself chiefly in the fibrous tissues and may leave the joints comparatively unaffected. In such cases the colonies of microbes lying deep in the valves of the heart, in the pericardium, periarticular tissues, and elsewhere, seem to be protected from the action of the salicylate, which, probably, only reaches them in small amount, and hence the response to treatment is not so rapid or satisfactory. Nevertheless, they generally in time yield to large doses along with free local application of methyl salicylate, but often not before one or more of the cardiac valves have been permanently damaged, or rheumatic thickenings have formed in other fibrous tissues. When these rheumatic indurations are quite recent the administration of potassium iodide and the application of small blisters exert a marked deobstruent effect. Massage is even more effectual if they are in situations which can be reached by it, and it is a good plan to massage every case in which they can be detected, beginning as soon as recovery from the acute infection is definitely assured. This prevents them becoming fibrous and chronic.

Postpartum Hemorrhage.—Hooper (Australian Medical Journal) says that the improper use of forceps, or the careless administration of anesthesia, causes the uterus to delay its firm contractions and retractions.

He advocates the immediate application of forceps in cases in which experience tells him that without their aid the uterus would be unable to expel the child, and he would strongly insist on the more cautious use of the anesthesia during the second stage. Still more would he most earnestly urge constant attention to the uterus directly the child is born, and particularly to the right way to perform the Dublin method of expressing the placenta. Of course, if violent hemorrhage occurs immediately following parturition due to an obviously relaxed uterus, he would immediately proceed to make the uterus contract by external manipulation,, by the injection of pituitary extract, or hot sterile water at 120 degrees, and if the cord were pulseless and the placenta were in the cavity of the uterus, he would carefully and slowly extract it with his clean and gloved right hand, while the left hand retained the mastery over the uterus. This is the only condition which would make him hurry the third stage of labor.

Weber evidently considers tamponade to be the very best treatment performed in a proper manner by the use of sterile gauze under every aseptic precaution, it being especially important to pack the whole cavity of the uterus; the vagina should also be packed. He finds the packing, to be successful, must be allowed to remain for six hours at the most, when the uterus will be found firmly contracted and hemorrhage does not recur, because:

First, the pack acts as a foreign body and the uterus tries to rid itself of the same.

Secondly, by a mechanical pressure upon the lumina of the bleeding vessels by the gauze.

Thirdly, the blood coming into contact with the gauze clots more readily, and thrombosis in the vessels occurs.

Ahfeld and Veit oppose packing. Veit says he has not seen a single case of postpartum hemorrhage which would induce him to pack on account of hemorrhage. Personally, the author dreaded the risk of sepsis wherever he has used the uterine tamponade, and seldom uses the tamponade because it distends the uterus rather than making it contract.

At the Basle Women's Hospital, out of ten thousand confinements, seven died from postpartum hemorrhage, of which six had been tamponaded.

Weber claims that the use of Momberg's treatment in many clinics is so favorable that it must be considered a dependable one in serious cases of uterine atony, and as such is to be recommended to the general practitioner.

Momberg's method consists in passing a stout rubber tube several times round the body between the pelvis and the lower costal margin, and tightening it until pulsation in the femoral arteries ceases. The patient is given ¼ grain of morphine.

The tube is about the thickness of a thumb, and 2½ to 3 yards in length. It is placed just above the iliac crests and is slowly drawn tight by two people. When femoral pulsation ceases the tube is fixed with a pair of forceps. It is more easily adjusted if it be oiled at first, and as a rule it is not necessary to wind it round the body more than twice. When pressure is made the coils of the intestines slip up toward the thorax, but if any of them be compressed they remain for a considerable length of time without sustaining injury. The ureters also escape damage. The tube is kept tight for ten to thirty minutes, and it is slowly relaxed, the lower limbs being well bandaged first—if hemorrhage recurs it is readily readjusted. Out of 30 cases reported, 28 nave been successful. Of these, eight were due to atony of the uterus, 12 to retained placenta, and two to laceration of the cervix. This method gives the obstetrician time for disinfecting his hands and the parts before manipulation. Patients tolerate the treatment well, though collapse may follow the removal of the ligature, the blood rushing into the lower limbs and producing anemia of the brain or heart. This may be obviated by the Trendelenburg position or by tilting the bed. Where other methods fail, this one may be the means of saving life.

Baudeloque's method of digital pressure of the aorta at the level of the fourth lumbar vertebra is difficult and inconvenient, and is not always effective, since the ovarian arteries, which branch off just below the bifurcation of the aorta, carry blood through the uterus, and a flow through them is not checked by Baudeloque's method. The inferior vena cava is compressed at the same time, and that is undesirable.

Briefly, then, the indication for treatment in certain cases of postpartum hemorrhage, and they are the most serious, lies in using every known effort to make the uterus contract without making any immediate attempt to empty the uterus of any piece of placenta which may remain within it.

The Roentgen Therapy of Uterine Myoma.—Wetterer-Mannheim (Archives of the Roentgen Ray) claims for Deutsch, in 1904, the first report that hemorrhage of uterine fibroma could be controlled by Roentgen irradiation.

In 1906, Foveau de Courmelles and Laquerriere in France, and Gorl in Germany, began treating myoma of the uterus with the x-ray, and obtained results with ovarian atrophy and shrinkage of the uterine tumor. He refers also to the work of Frankels and Albers-Schonberg, Krognig and Bordier having employed this method and successfully. He reports successful results in a number of cases under x-ray treatment, concurring in the result obtained with the other writers as to the value of the method.

He states that it requires from four to six months to effect a satisfactory result in these cases. He believes that the effect is usually due to the action on the ovaries having become hardened and small in consequence of the irradiation. In addition to the action on the ovaries, he states in his opinion, in which most observers concur, that there is a direct action on the myoma itself before there is sign of the arrestment of the menses. This he attributes to the effect on the uterine vessels contracting and cutting off the blood supply to the tumor. In confirmation to this he states that the intima or living membranes of the blood vessels are more sensitive to the x-rays than the skin. It is here, he states, that the x-ray attack the myoma, causing swelling of the endothelial cells and obliteration of the vessels, thereby setting up a further destruction and degeneration of the muscular tissue of the tumor. He gives the following conclusion:

"Size of the Tumor.—Tumors of considerable size naturally require a longer treatment than smaller ones. Moreover, a large myoma shields the ovaries from the action of the x-rays.

"Character of the Myoma.—It is evident that an interstitial subserous myoma will be much more amenable to x-ray treatment than the submucous variety—at all events, when it is situated on the front wall of the uterus.

"Technic.—The most important point is deep irradiation with filtration—the bombardment of the ovaries and myoma with large doses of x-rays—without injury to the skin.

"To accomplish this satisfactorily we must attend to the three following factors:

"(1) Homogeneity of the Irradiation over the Whole Area of Exposures.—This is obtained by placing the focus as far as possible from the object, thus diminishing the difference of radiation intensity between the surface and the deeper portion of the irradiated body.

"(2) Specific Homogeneity.—This we obtain by using a focus tube as hard as possible, and eliminating the softer rays by filtration.

"(3) Cross-fire.—The object to be irradiated is attacked on all three sides from different directions. Thus any one skin area receives only one-third of the dose of x-rays impinging on the tumor itself."

Enuresis and Thyroid Extract.—Firth, in The London Lancet, says that the cases which appear to react to this form of treatment better than all others are those in which the enuresis has persisted since birth, and in which the patients are also backward. The Dr. has had five of these cases, all of which showed marked improvement. Seven cases with enuresis from birth were stated to be quite satisfactory as to the mental condition, and only one of these improved. Of the sixteen cases in which the enuresis started during childhood, six out of the ten improved were backward compared with two out of six not improved. The duration of the acquired enuresis was of no importance in diagnosis.

In seven cases in one group hypertrophy of tonsils and adenoids was present, and four had undergone operation for this condition. In another group four children were similarly affected, and one child had had them removed. In no case could any connection be traced between operation and enuresis. In no case could the enuresis be ascribed to the genitalia, whilst threadworms had been noticed in three cases of those improving and in two cases amongst those who received no benefit by treatment. In three cases the enuresis could be traced to a definite exciting cause—an operation for hernia, scarlet fever, and enteric fever respectively. The first of the cases was cured, but the other two did not respond really well to the treatment.

An attempt was made to obtain data for controlling the effects of the thyroid extract from observations on the pulse, temperature, and weight. The pulse-rate did not give any definite evidence of overdose until diarrhea commenced, and showed wide variations in uncomplicated cases. Had the children been under observation in hospital where the pulse could have been recorded twice daily, thyroidism would probably have been detected by the increased pulse-rate before the onset of diarrhea made it obvious, but a weekly attendance and the likelihood that the accompanying excitement will disturb the pulse-rate seem to render the pulse an untrustworthy guide, and to explain the difference noticed for which no definite cause could be otherwise assigned.

The temperatures were taken in the rectum and varied between 98° and 100° F. before treatment commenced; all cases except five showed an average rise of about 1° while under treatment, but there was no distinctive feature about the behavior of the temperature in any group.

Fever and Salvarsan.—McIntosh, Fildes and Dearden (Zeitschr. fuer Immun.) say that the intravenous injection of salvarsan is usually followed by a very constant symptom-complex. Within an hour, the patient has a chill followed by fever, headache, backache, nausea, vomiting, rapid pulse and respiration. In some cases these symptoms may reach an alarming grade culminating in collapse.

In investigating the cause of this phenomenon, they have made some astonishing observations. They found it not to be due to the salvarsan, since the saline solutions, used for dissolving it, were followed by the same manifestations if injected intravenously without the salvarsan. Neither was it due to the salt, since no difference was noted whether a 0.9 or a 0.6 per cent. NaCl solution was used. Further investigation showed that the distilled water used was rather rich in bacteria. These were killed when the water was sterilized, but their dead bodies acted as toxines, producing the fever and other disturbances when injected intravenously. If distilled water, filtered through porcelain, or sterilized immediately after distillation, was used in the preparation of the salvarsan solution, a febrile reaction never occurred. The only exception was two cases of extremely florid syphilis, in which fever occurred after the injection of salvarsan prepared with non-toxic water. In these cases, the destruction of great numbers of spirochætæ may have been responsible for the fever.

The Vaccine Therapy of Acne.—Allen (Journ. Vaccine Therap.) says that before undertaking the treatment of any case it is essential that all predisposing causes be removed. Attention must be paid to the bowels, the diet of each patient regulated, "carious teeth must be stopped or extracted, crowns and bridges removed, and pyorrheic gums receive attention, while follicular tonsillitis should be adequately treated." Any seborrhea of the scalp must be dealt with, and care be taken to keep the skin clean; the acne expressor may be required. The patient is then ready for vaccine treatment. Whenever possible, an autogenous vaccine should be secured, although good results have been obtained by using stock vaccines both of the acne bacillus and the staphylococcus albus. Begin with doses (five millions of the former, 100 millions of the latter) in combination. Injections are best given in the buttock, flank, or one and a half inches below the centre of the clavicle. In twenty-four to forty-eight hours there will be either definite improvement or a slight aggravation. Allen expresses his preference for such doses as will slightly aggravate the symptoms for forty-eight hours, followed by improvement lasting a week. Do not attempt to proceed too quickly. "In an average case the dose of 100 million staphylococcus and five million acne is repeated four or five times, at weekly intervals, and then increased to 250 millions and more; gradually increasing until a maximum of 2,000 million staphylococci and twenty million acne is reached." With the higher doses the injections must be less frequent. A severe case lasts six to twelve months. The Dr. is inclined to regard 50 per cent. of complete and lasting cures as all that is to be expected in this form of treatment.

Treatment of Epistaxis.—Boyd, in the Australasian Medical Gazette, describes a simple method of plugging the nares for obstinate epistaxis which has resisted the usual routine of compression, cold or iced douching, smart purgation, and anterior plugging. The Dr. remarks that the operation of posterior plugging as commonly performed is very unpleasant to the patient, and that it requires special instruments, which are nine times out of ten not procurable in an emergency, The plan he recommends is easily and quickly followed, and requires only strips of clean muslin and a pair of dressing forceps; it is said to be almost as efficient as Rose's bag, and hardly more than inconvenient to both patient and operator. A dry piece of fine-starched muslin about six inches square is wrapped round the points of a closed pair of dressing forceps, by placing the latter in the center of the square and then folding the muslin round the blades umbrella-fashion. This is then passed through the nares until it impinges on the posterior pharyngeal wall; the forceps is then withdrawn. The edges of the muslin are spread out over the face, and the hollow cone inside the nose is rapidly plugged with small pieces of cotton wool soaked in any available styptic-vinegar in default of the more usual astringent drugs. If, says the author, it is not necessary to plug the post-nasal fossa, the muslin can be pulled very slightly forwards after the withdrawal of the forceps, so as to clear the posterior wall of pressure before the plugs are introduced. This is worth bearing in mind, as it avoids the temporary deafness otherwise set up.

Contrast Staining of Formed Elements in the Urine.—Schott (Muench. Med. Woch.) in describing the value of staining the formed elements in urine, states that by his method the sediments retain their stain for weeks, becoming less distinct the older the specimen grows. The Dr. uses two solutions; one of five per cent. water soluble anilin-blue, the other a two and a half per cent. solution of eosin in glycerin with the addition of five per cent. solution of carbolic acid. Three drops of the analin-blue solution and six drops of the eosin solution are added to 10 c.c. of urine. This mixture is centrifuged to secure the stained sediment for microscopic examination. By this method it is claimed that the detection of casts in a fresh specimen becomes a comparatively easy matter.

Tuberculous Pyosalpinx.—Barbour and Watson (Jour. Obst. and Gyn. British Empire) from the study of three cases, are inclined to consider the infection as traveling through the mucous surface. In none of the cases was there evidence of abdominal tuberculosis, but it is conceivable that the organisms were there in small numbers and that the peritoneum was able to protect itself, while some were drawn into the tubes. After the primary infection of the mucosa of the outer part of the tube there is evidently a lymphatic spread inwards toward the uterus. The epithelium is at first stimulated to overgrowth with deep extension into the tissues, giving an appearance very like carcinoma, and it is conceivable that an arrest of the tubercular process before destruction of tissue occurred might leave the epithelium in such a state of activity as to take on a cancerous character.

Vaginal Oblique Resection of Body of Uterus.—Rieck (Zentralblatt fur Gynakologie) gives an illustrated description of his technic for resection of the uterus instead of amputation. It avoids the wedge excision and suturing of raw surfaces, and the abdominal cavity is walled off beforehand, the resection being entirely extraperitoneal, the ovaries and part of the tubes being shut off above. The oblique resection leaves the remaining portion in better shape to conform to the vagina and bladder. The Dr. draws out the body of the uterus with forceps, seizing it at each upper corner, and tilts it first to one side and then to the other to permit suturing the peritoneum together behind and over it to wall off the abdominal cavity water-tight. The operation is indicated for excessive uterine hemorrhage from any cause, myoma, endometritis, arteriosclerosis, nervous or ovarian disturbance, and especially for excessive menstruation in young women intensely anemic, weak and nervous from constant losses of blood which nothing seems to arrest except removal of part of the uterus. This, by the technic described permits continuance of menstruation. He regards vaginal resection of the body of the uterus as a certain, almost harmless and rapid means of reducing excessive menstruation to normal proportions.

Consumption in Children.—Sawyer (Brit. Jour. Child. Dis.) remarks that consumption as it occurs in adults is one of the rarest of all the affections in children, and comments on the great discrepancy of the figures published in the annual school medical reports. The future and postmortem records do not reveal the error to be on the side of the sceptics. In 850 autopsies evidence of healed tubercle was found in seven, and clinically one in 1,175 children examined. Tuberculosis of the lungs in paediatric practice is found to be either a tuberculous bronchopneumonia or part of a generalized infection. Difference in opinion arises from the interpretation of signs found, such as tubular breathing or impairment of breathing at one apex, and from the fact that in debilitated and rickety children transient areas of dulness are observed, due to portions of the lungs not acting to their full extent, by a bronchus being plugged with secretion. Much of the supposed consumption is the chronic bronchial catarrh due to enlarged tonsils and adenoids. Chronic coughs are not due to tuberculosis of lungs, which usually kills in less than a year, but to nasopharyngeal disorder and a mild form of bronchiectasis especially common after whooping-cough. Prognosis is worse the earlier the infection occurs, says Hahn, especially if in the first year.

Repeated and constant infection is unfavorable, and perhaps the virulence of the bacilli. Illegitimacy favors the occurrence and course of infection; bad hygiene and acute infectious diseases adversely affect the prognosis. Children without fever in whom the body-weight improves and in whom the process in the glands is limited often survive. Cases in which tuberculosis occurs in the eyes, glands, bones or joints, have a good chance of life. Infants with a tendency to generalization and with affection of internal organs, especially the lungs, do badly. Breast-feeding has no distinct influence on the course and prognosis of infantile tuberculosis.

That herpes zoster may occur at the very onset of consumption is the belief of Barbier, who thinks it is a diagnostic point and shows an infection of the nervous system or the initial sign of an unsuspected tuberculosis.

Zona is believed to be symptomatic of tuberculosis by Pierret, who has seen ten cases, three in children, in which the disease was present or shortly developed. He believes that the presence of herpes zoster in the tubercular patient renders the prognosis bad.

Discussion on the Treatment of Tuberculous Joint Diseases in Children.—Tubby (British Journal of Children's Diseases) after reviewing the earlier methods of treatment said that three factors were responsible for the great changes which had occurred in practice: (1) The effect of climatic and sanatorium treatment; (2) the valuable aids to the diagnosis given by the Rontgen rays, and (3) the use of the new forms of tuberculin. In any case, the duration of the disease must be reckoned in years not in months. He felt that conservative measures gave better results, both as to the cure of the disease and retention of function, than the so-called radical operations. Sir Antony Bowlby dealt with the results obtainable without operation. Children had capabilities of repair denied to adults, and the outlook as regards cure was very favorable under proper treatment. The important items in treatment were good food, including a liberal supply of milk, an open-air life, rest and plenty of attention to the general health and local disorders, such as adenoids and bath teeth. He thought he had seen tuberculin do good in some cases. His treatment of abscesses was asceptic incision and temporary drainage. Even when there were open and septic sinuses good results could be obtained by attending to the general health. He amputated less and less frequently for even apparently desperate conditions. Mr. Robert Jones said that tubercle in the early stage in children nearly always ran a benign course, providing three things were attended to: (1) That the affected part should have absolute rest, (2) that the child should have good food, (3) the child should have good country air, being out of doors day and night. Immobilization of the joint should be very complete. The Dr.'s practice was never to open an abscess till it came up to the surface, and then only by a small puncture. Sir Watson Cheyne said that he now practically never operated on a tuberculous joint in a child. In the treatment of abscesses he used antisepsis and ascepsis, opened freely, and scraped it out. The Dr. always used tuberculin, but had never seen a definite good result he could attribute to it.

Sputum Examination in Children.—Riva-Rocci (Gaz. Med. Ital.) uses a glass plate, 8 by 12 cm., set in a nickel frame, from which it can easily be taken; the frame has a conveniently curved handle. The plate placed in the frame has both its surfaces free, and a ledge in the frame allows it being laid on the table or in a box without touching. The author also uses a collector, devised to gather up the deposit on the plate and convey it to a microscope slide, consisting of a metal handle, having at one end flat forceps blades, the size of an ordinary glass slip. Between these blades there is a thin strip of rubber ½ mm. thick, projecting about 2 mm. from the edge of the blades. With these instruments the procedure is as follows: The plate, previously sterilized, is placed in its frame;every time the child coughs the nurse holds the plate in front of its mouth,about two inches from the lips, in such a way that its centre corresponds to the buccal aperture, and keeps it there during the fit of coughing; the plate is then replaced in its box, and the procedure repeated every time the child coughs. Both sides of the plate may be exposed to the child's mouth. After a sufficient time, generally about half a day,the plate is taken out for examination, the collector is cleaned and moistened with sterilized water, and its rubber end used to clean up every part of the plate. The material collected is conveyed to a glass slip, dried, fixed, and colored, and then examined. In this way the author has examined many cases, demonstrating thereby the organisms found in children's sputum. In the differential diagnosis between pulmonary tuberculosis and simple bronchitis it has afforded him valuable aid.

Congenital Dyschesia.—Hertz (British Journal Children's Diseases) does not favor special diet or aperients or abdominal massage.

When defecation is rendered painful on account of hard stools, he favors the administration of a little liquid paraffin at first. Then the child should be placed upon the stool for at least ten minutes daily after breakfast. If the attempt fails, a water or glycerin enema should be given. The glycerin will usually be found most effective, an ounce being used the first day. The next day replace half a drachm with water, the third day one drachm and so on until the enema is composed entirely of water. In a short time enemata will be unnecessary.

In those cases in which water enemata act better from the start, it is well to use one ounce for the newly born baby, six ounces for a child 12 months old and a pint for one of eight years.

Insert the tube just beyond the anal canal and hold the introducing funnel not more than 18 inches from the body. The water can be reduced one-twentieth part until no more is required.

He believes this method of treatment will overcome the difficulty, but if left until adult age, enemata will be permanently necessary. The Dr. says that low pressure injections, with glycerin as dilute as possible and as little water used as possible will always keep the enemata effective.

A Case of Myatonia Congenita.--Charles (The British Journal of Children's Diseases) describes the case of a boy, aged six years, who showed marked atonia of the muscles of the arms and legs, and in a less degree of the trunk. The condition dated from birth; the family and personal history revealed no other disturbance of note. The laxity of the muscles was most marked in the distal portions of the limbs; the hands and fingers were extremely flail like, and the wrist could be partly dislocated; the feet were completely flattened. The strength was fair, and there was no wasting of muscles. Collier and Holmes thus describe the main points of the complaint, contrasting it with the myopathics: (1) An absence of familial tendencies; (2) the disease is almost always congenital; (3) local wasting of individual muscles or groups of muscles is not seen in myatonia congenita; (4) the affection of the periphony of the limbs is constant in myatonia, but rare in the myopathics; (5) myatonia does not spread to regions previously unaffected, while slow spreading to other parts is characteristic of the myopathics; (6) the deep reflexes are absent from the first in myatonia, but disappear slowly in the myopathics; (7) some cases of myatonia recover while the myopathics never do.

Discussion on the Diagnostic Values of Opthalmoplegia Partial and Total.—Russel. (British Medical Journal), discusses the diagnostic values of opthalmoplegias. His remarks bearing, as they do, upon a class of defect which is frequently forced upon the attention of opthalmic surgeons. He regarded paralysis of any ocular muscle, or group of muscles, as a certain sign of organic disease, But care must be taken that the deviation is really due to paralysis and not to syasm such as is common in the nystagmus of Thomsen's disease. Paralysis of an eye muscle not only postulates an organic lesion, but excludes many varieties of organic disorders of the nervous system, among them diphtheritic paralysis in which ophthalmoplegia externa is not found.

The mode of onset of paralysis is no reliable guide to the underlying disease. In insular sclerosis, paralysis is often sudden in onset, and may be transient in nature.

It is doubtful whether we can rely upon the significance of certain groups of ocular paralysis in the localization of the causal lesion in the medulla.

The speaker asked whether the phenomenon of reflew iridoplegia can be held to be pathognomonic of the parasyphilitic affections and general paralysis.

In the discussion which followed, Farquhar Buzzard, of London, said that the importance of the Argyll-Robertson pupil in the diagnosis of syphilitic and parasyphilitic disease could hardly be over-estimated. He emphasized the fact that the abolition of the light reflex, either unilaterally or bilaterally, often meant that there was was a lession of the third ventricle. When the sign was added to the classical signs of cerebraltumor, it was useless to operate for the growth would be found to be too deeply seated for removal.

Syphilis Relapses Under Mercurial and Salvarsan Treatment Respectively.—Harrison (Journal of the Royal Army Medical Corps) says that in untreated cases of syphilis and those under mercurial treatment, the character of the symptoms is generally in accordance with the time which has elapsed since the primary sore made its first appearance. The intervals between the successive stages may be lengthened by mercurial treatment, but, speaking generally, early symptoms are not repeated. Thus primary sores do not recur two months or longer after they have healed, nor do early secondary rashes return in any high proportion three months or longer after they have disappeared.

With salvarsan-treated cases, the experience has been different from this. Of the cases suffering from primary sore only, which were treated with salvarsan, active signs returned in five after intervals of two and a half to ten and a half months, and in four of these the only sign of the relapse was the chancre, which recurred two and a half, two and a half, ten and a half, and three and a half months respectively after firsi healing. Out of eleven cases which suffered from early secondary rash when thsy first came under treatment and subsequently relapsed, in eight the same rash returned, twelve, four, three, ten, seven, seven, four, and seven months respectively after it had first disappeared. One of these cases was instructive in this respect: he was grst treated with salvarsan for roseola, sore throat, and synovitis, all of which rapidly disappeared after the injection. Subsequently he suffered from two relapses, which occurred three and six months respectively after the first injection, and on each of these occasions all the above symptoms returned.

The sequence of events in syphilis, which has been roughly divided into primary, secondary, and tertiary syphilis, and parasyphilie, is capable of two explanations: (1) That the spirochætæ pallida undergoes a series of changes when resident in the tissues, and that in each of these successive phases the symptoms to which it can give rise are peculiar to the stage at which it has arrived. (2) That it is the tissues which change, so that the longer the spirochætæ acts on them, the more the lesions which result from any increased activity of this parasite approach, first, the characters peculiar to the so-called secondary, and then those of the tertiary stage.

The first explanation would be difficult to prove, and against it is the fact that infection with spirochætæ derived from a secondary or tertiary lesion results in a primary sore. In favor of the second explanation is the well-known fact that in the majority of cases of syphilis, whether untreated or treated with mercury, reinoculation does not result in the production of a second chancre. As Queyrat showed, this refractory behavior of the skin and mucous membranes to infection from without is gradually developed during the ten days which succeed the appearance of the primary sore; as the end of this period approaches the sore sesulting from reinoculation becomes more and more evanescent till, finally, no chancre follows. Finger and Landsteiner succeeded in producing skin lesions in such cases by inserting large amounts of syphilitic virus in pockets under the epidermis; these were not chancres, however, but simulated the lesions from which the patient was suffering at the time. Thus in the secondary stage a papule followed the inoculation, while in patients suffering from gummata or ulcerating syphilides identical lesions formed at the sites of inoculation. That these were due to the newly introduced spirochætæ, and not to those already infecting the patients, was shown by the fact that if the former was previously killed the result of the inoculation was negative.

The evidence is, therefore, strongly in favor of the theory that it is the length of time during which the spirochætæ have acted on the tissues which determines the characters of the successive manifestations of syphilis.

If we accept this view, the nature of the above-mentioned relapses in cases treated with salvarsan only indicates that from the date of the last injection till shortly before the appearance of the clinical symptoms the spirochætæ had not been active in the majority of cases. This is supported by the fact that in most of these the Wassermann reaction had returned to positive only three or four weeks before clinical symptoms returned, and it shows that, unlike the case with the great majority of patients who are treated with mercury, the latency was not apparent only, but real. It remains to be seen whether cases which relapse clinically many months after the Wassermann reaction has returned to positive will have symptoms of a later type than those for which they were first treated; since the Wassermann reaction, as ordinarily elicited, is not an index of immunity, but closely accords with the activity of the parasites, it is to be expected that they will.

Further evidence of the superiority of salvarsan over mercury in its action on the S. pallida is afforded by the cases of reinfection which have been recorded; one undoubted case of this kind has occurred.

Torsion of the Fallopian Tube as a Factor in the Etiology of Hematosalpinx Apart from Ectopic Pregnancy.—McIlroy (The Journal of Obstetrics and Gynecology of the British Empire) reports a case and reviews the literature of hematosalpinx and torsion of the tube.

His patient was 46 years of age. She had a sudden attack of pain in the left iliac region associated with cold sweats and some collapse. There was no uterine hemorrhage, vomiting or marked constipation. On examination five days later a mass about the size of an orange was palpated which was immovable, tender and incorporated with the uterus, the latter was retroflexed. At operation, a few days later, the uterus was found enlarged, retroflexed and posterior to it was a soft mass, deep red in color and adherent to the uterus and sigmoid. This mass proved to be a left hematosalpinx with two complete twists of its uterine end. The tube was removed and the uterus was suspended to the abdominal wall. The tube was distended with a retort-shaped blood clot forming a tumor the size of an orange. No traces of chorionic villi could be found and the entire wall of the tube was infiltrated with blood.

He discusses the various causes of hematosalpinx, apart from torsion. The most frequent cause is tubal pregnancy; aside from this blood in the tube has been found in pregnancy, atresia of the genital canal, menstruation, inflammatory conditions and tumors of the tube and disorders of circulation.

From a review of the literature of torsion of the tube as a cause of hematosalpinx, he concludes that there is not any one definite cause for this, but when strangulation follows, there is an effusion of blood into the tissues of the tube. The exciting causes are mobility, changes in intra-abdominal pressure, and intestinal peristalsis.

Digitalis in Typhoid.—Skutelsky (The British Medical Journal) has given digitalis in 93 out of 495 cases of typhoid treated at the Prague Garrison Hospital between the years 1899 and 1910. The indications for its use were heart weakness as shown by increased frequency of pulse, arrhythmia of heart, weak tension, and defective filling of the pulse; 24, or 25.5 per cent. of the cases, ended fatally. This percentage is high, because the cases thus treated were the most severe ones, but the case mortality of the whole number of cases was not unduly high. Digitalis was always given in the form of the infusion, and was frequently combined with sulphuric ether. Notes of 30 of the cases thus treated are given in the article. In the first case described the patient's condition during the second week of typhoid had become apparently hopeless: signs of edema of the lungs were present, the pulse was scarcely perceptible and was arrhythmic, but within three days after 1.8 gram (27 grains) of digitalis had been given, without any other treatment except the customary cold compresses, the condition had altogether changed and all threatening symptoms referable to the circulatory system had disappeared. In another case, which was almost as striking, the improvement began twenty-four hours after the first administration of digitalis. In none of the cases did the digitalis treatment appear to do harm. Those which ended fatally were either (1) cases which on admission were in a desperate condition in the second or third week of illness, and in which several times there was severe hemorrhage from the intestine on the day after admission. (2) Cases in which, in spite of temporary improvement in the circulatory system, death ensued as a result of inflammatory changes in the lungs or in which complications such as abortion, severe intestinal lesions, or sepsis, made the prognosis much more unfavorable. (3) Cases in which the time was too short for the action of digitalis to become effective, or in which the heart muscle was too much degenerated to allow of effective action. (4) Cases which were resistent to the action of digitalis. The author did not find that the increase of blood pressure due to digitalis appeared to cause intestinal hemorrhage. The action of digitalis usually became apparent twenty-four hours after the first dose was given; the administration was interrupted after a few days in order to avoid cumulative action. . The author concluded that (1) digitalis exerts a favorable influence on a heart severely affected in typhoid, and often appears to be the direct cause of saving of life; it should be given under all circumstances at the first symptom of heart weakness. (2) The treatment must be individualized; the initial dose is from 0.5 gram (7.5 grains) to 1.0 gram (15.5) a day, according to age, general condition, and severity of symptoms; on each following day the dose should be diminished by about 0.1 gram (1.5 grains), and the administration continued until 0.1 to 0.05 gram (1.5 to 0.7 grains) has been reached, unless the desired result has been arrived at earlier. (3) In severe cases the combination of digitalis with small doses of sulphuric ether is indicated as giving a quicker and more intense action. (4) A history of intestinal hemorrhage does not contraindicate the use of digitalis, but care is needed in the dosage, especially in the case of older people. (5) In severe collapse, in order to obtain a quick effect, other agents—such as camphor, ether, strophanthus, saline infusions, and adrenalin—are to be preferred. (6) The administration is to be discontinued on the appearance of any sign of cumulative action.

Treatment of Diabetic Acetonemia.—Lepine (The British Medical Journal) refers to the difficulty of dealing with the carbohydrate supply in diabetes. If the carbohydrates are too restricted it has been found that there is a risk of aggravating the acetonemia, whilst if they are given too freely the diabetic condition becomes worse, and the glycolytic insufficiency increased. In each case daily analyses should be made to show how the acetonemia and glycosuria stand respectively. Sodium bicarbonate may be given in large doses to saturate the diacetic acid and oxybutyric acid in the blood; and to facilitate the elimination of the latter as a sodium salt. If acetonemia was simply an acidosis it would have been easy to deal with it in this way. But it is a special intoxication, and Desgrey having shown that the addition of alcohol to propionic and butyric acids diminishes their toxicity, the fact has been made use of with some favorable results in the treatment of acetonemia. Intravenous injections of alkalis are not on the whole to be recommended. If given at all they are best administered before coma has supervened. The solution the author uses is one of 17 grams of sodium bicarbonate to a litre of water—isotonic. Two litres of this solution may be given, and an hour should be taken in its administration, so as not to overcharge the heart. Copious diuresis follows as a rule.

Bruits Heard over Manubrium Sterni in Children.—Sawyer (British Journal of Children Diseases). The Dr. has analyzed the bruits heard over the manubrium sterni in 65 children between two and a half and eleven and a half years of age. They were heard most often in children between the ages of four and nide. In all cases except one the bruit was louder in the neck than over the sternum. It was found that in all cases in which a bruit could be heard over the sternum it was audible in the neck, and that a bruit was often heard in the neck when the head was bent back without it being audible over the sternum. The conclusions arrived at from these facts are that in many children a bruit is produced in the internal jugular vein by the head being bent back and that it depends upon the loudness of the sound whether it can be heard over the sternum. Granting that the bruits arise in the internal jugular veins it is easy to understand how they are produced. Bending the head backward puts these veins on the stretch, and causes them to be compressed against the transverse processes of the lower cervical vertebræ. The sternomastoid muscle also compresses them, for it becomes very tense when the head is thrown back in the position required for the examination. The sternohyoid, sternothyroid, omohyoid muscles, and even the platysma may help in this compression. The stretching of the vein and its compression must diminish the size of its lumen over a certain portion, and therefore a condition is produced in the vein which is likely to give rise to a bruit. That the bruit is produced in this way is also supported by the fact that when the chin is directed to one side a bruit often appears over the side which is on the stretch. A bruit can often be made to appear in this way when previously it did not exist with the chin in the middle line. The venous hum over the sternum in children with the head thrown back appears, from these observations, to be a normal condition in the great majority of cases, and should be considered to be of no importance unless accompanied by physical signs of compression.

The Action of Thyroid Extract upon the Heart.—Haskovec (Wiener klinische Wochenschrift) says that the secretion from the thyroid gland contains a substance with a characteristic action on the cardiac nerves. By experiments upon dogs he has been able to demonstrate that it acts in two ways: (1) producing a lowering of the blood pressure by vasodilatation and also by diminution of the force of systole, and at the same time causing an (2) acceleration of the pulse, both by direct action upon the heart muscle and by stimulating the center of the nerves of acceleration.

This depressing and accelerating action is diminished by small doses of alcohol; large doses of alcohol, on the contrary, increase the cardiac action of the thyroid secretion, but this effect is soon counteracted by the stimulation of the vagus which alcohol produces.

Experiments in the Restoration of Paralyzed Muscles by Means of Nerve Anastomosis.—Kennedy (The British Med. Journ.) has performed nerve anastomosis in dogs and monkeys with complete restoration of function. The Dr. has experimented chiefly on the facial nerve and obtained the best results by uniting the distal cut end with the central nerve stump. When this is not possible, the distal end is attached either to the spinal portion of the accessory nerve or to the hypoglossal nerve. The former is the better, as the involuntary associated movements are not so marked as in anastomosis between the facial and hypoglossal nerves. Of the muscles supplied by the facial nerve the orbicularis oris shows the most complete and the earliest return of functional ability. It is essential that the nerve be completely severed before repair is attempted.

On the Division of the Posterior Spinal Nerve Roots.—Groves (The London Lancet) says Foerster's operation is not always successful in the relief of pain, according to the observations made by the author, doubtless on account of the psychic element in the paroxysms.

The best result is obtained in affections of the pyramidal tract, the spastic condition having been relieved in practically every case. In the treatment of the visceral crisis in tabes dorsalis it is better to resort to radicalectomy before the patient's condition is undermined by morphine and insufficient nourishment. The danger of operatic shock or of hemorrhage is slight, especially after adrenalin injection. In resecting the cervical roots laminectomy is of advantage, while the lumbar roots are best resected at the exit from the canal.

Erythema in the Course of Infectious Diseases.—Hutinel (La Presse Med.) refers especially to the erythema which occasionally supervenes in the course of enteric fever, and which, in his experience, is often associated with a certain group of severe symptoms. The erythema itself is usually polymorphous in character, assuming a resemblance to both measles and scarlatina in different parts of the body. The sites most favored are the knees, elbows, wrists, and ankles, and, above all, the buttocks and the face. The eruption is not accompanied by itching, and is followed by more or less desquamation. This type of rash is, of course, seen not infrequently in enteric fever and in the course of the other acute infectious conditions.

The Dr. regards it merely as a single element in a symptom complex, of which the other signs are vomiting, diarrhœa, a retracted abdomen, a choleraic facies, and a low pulse tension. The temperature tends to fall rather than rise, and the appearance of the symptoms has sometimes suggested the occurrence of a perforation. There is in all cases a profound asthenia and well-marked wasting. So far as enteric fever is concerned, he has observed what might be described as an epidemic of this symptom-complex, 13 out of 36 patients being affected, and no less than six, or nearly half, succumbing. The Dr. regards it as identical with the erythema which complicates severe cases of septic scarlatina, which is occasionally observed in broncho-pneumonia following measles, which was recognized in diphtheria before the days of serum sickness, and which may be seen in acute intestinal inflammations and colitis.

The rash, in other words, is merely one symptom of a general condition, probably an infection depending upon streptococci or other micro-organisms. It is, of course, important to exclude the possibility of drug rashes. He lays stress upon the fact that in all his autopsies he has found the liver enlarged and fatty and the suprarenal glands increased in size and weight. Both medulla and cortex are affected, but the latter suffers most and may show areas of necrosis. In some instances both the thyroid and pancreas were also diseased. The writer says that these changes may be due to the direct action of micro-organisms or their toxins as in the case of diphtheria, and that the micro-organism concerned may be either that which is responsible for the original illness or one which has become imported secondarily.

Miscellaneous.

Dangers Due to the Use of Menthol.

Leroux states that menthol used in treatment of nasal conditions is not only injurious, and dangerous, but also sometimes fatal. He cites cases in which the use of a small amount of mentholated oil in the anterior nares for an acute coryza in infants has brought on the most alarming symptoms of dyspnea, ending in suffocation. The reflexes are excited by this drug before it is absorbed by the walls of the nasal cavities. It causes inhibitory spasm which may end in death. This drug when used for acute troubles also causes much pain, acute conjunctivitis, pseudoerysipelas of the face, pharyngeal cough, reflex otalgia, and ringing in the ears. Labial and nasal erythema may result in chronic cases and thickening of the nasal mucosa causing obstruction. The author believes that this drug should be used with the greatest caution especially in children.—La Presse Medicale.

The Vaginal Cesarean Section: Technique, Results and Indications.

Jeannin ranks the vaginal Cesarean section of Duhrssen with the classical abdominal Cesarean section, but with different indications. The vaginal operation cannot be made use of when the pelvis is contracted or obstructed by a tumor. It is valuable in cases of failure of the cervical tissues to dilate. It may be used in the interest of the mother in eclampsia, in the separation of the normally implanted placenta, in a rigid cervix, in cardiac troubles, and in amniotic infection. In the interest of the child it may be resorted to in prolapse of the cord, and when the mother is dead or dying. In general, it is indicated whenever rapid delivery is necessary and the cervix cannot be dilated rapidly. It is contraindicated in atresia of the vagina, very large fetus, abdominal implantation of the placenta, and previous infection. It is easy of performance and safe when the necessary rules are obeyed. It consists of opening the anterior and posterior cul-de-sacs and separating the peritoneum from the uterus up to the junction of the cervix and the fundus; the anterior and posterior lips are incised largely enough to allow of the delivery of the child by forceps or version.

Enemata and the Murphy Drip.

Martin of New Orleans, says that for the purpose of producing an evacuation an amount sufficient to distend the rectum of some soapy or oily substances should be administered, and administered gently, but rather rapidly; if to be retained, slowly and with as little pressure as possible; if for absorptive purposes, not faster than from 50 to 100 minute, and with an elevation of the reservoir of not more than four and one-half inches above the rectum, as any point above this will produce great discomfort to the patient and the rejection of the fluid. The capacity of the rectum varies with age. For an infant, one-half to one ounce; for a child of from two to five years, two to six ounces; from five to fifteen years, six ounces to one pint; for an adult, one to two pints.

The writer quotes from a letter of Murphy as follows:

1. That the natural condition of the large intestine is one of distention.

2. That the large intestine is a "dryer" of the alimentary material.

3. That all of the feces passes into the large intestine in a fluid or semi fluid state and is dried—that is, the fluid is extracted in the large intestine.

4. That the material in the large intestine is always held under low pressure or tension; when gas is formed or comes into the large intestine, producing a higher tension, it is immediately expelled.

5. On this basis it has been learned that

bland, isotonic fluids are rapidly absorbed by the large intestine.

6. If the tension is increased beyond a four or seven-inch hydraulic pressure, it causes a spasm of the bowel and discomfort relieved only by expulsion of the material.

7. It does not matter how fast the fluid is permitted to flow in. If the plus pressure is only four inches hydraulic, it will not be expelled by the intestine. Furthermore, it will not flow in rapidly with that pressure, as this is just about the intra-abdominal tension.

8. Normal salt solution, plain or with a teaspoonful of powdered corn-starch added, can be admitted and will be absorbed in quantities ranging from sixteen to thirty pints in twenty-four hours if the plus pressure does not exceed four inches under normal physiologic conditions, or an inch or two more in inflammatory conditions, which cause the abdominal tension to be increased.

9. It can, therefore, be readily seen that salt solution admitted by the drop or any other method into the bowel, accumulating there attains a pressure equal to the hydraulic pressure in the bag or can. And if the can is elevated more than six or seven inches above the level of the buttock or rectum, the pressure will become too great in the bowel—quickly if there is no clamp or restriction on the tube; slowly if the tube is restricted to a drop condition—but eventually in both so as to cause expulsion of the fluid.

10. If gas is formed in the large intestine when water is being admitted, the bowel will endeavor to expel it; and unless the tube is large and a means of rapid escape provided for, the gas with the fluid will be expelled.

11. A large tube, of three-eighths to one-half inch in diameter, is, therefore, essential to the proper administration of rectal salines. With no restriction or clamp on the outlet arm of the tube, the rapid expulsion can take place back into the can if the latter be low.

12. Any type of can or bag syringe can be fitted so as to have the material admitted drop by drop, and yet have a provision for its free return into the reservoir, with or without gas, should the tension on the intestine become too great or should the patient strain. From the reservoir leads a tube provided with a cut-off and a glass syringe from which the piston has been removed and a pipette substituted. This is connected with one arm of a Y-tube, the other arm having the escape tube leading to the top of the reservoir, while the main arm is in connection with the rectal tube.

13. Four ounces or eight ounces given in twenty-four hours would be very much like putting on a postage stamp where a Mason-apron size poultice is needed. It is inefficient, unscientific, and a delusion to the doctor and to the patient.

14. The portion of the tube within the rectum may be of soft or of hard rubber or of glass. If the last two, it should be so flexed that the outer end will not compress against the mattress and cause counter-pressure by the inner end upon the rectum. The tube should have good-sized openings. If multiple, they should be one eighth inch in diameter; if single, a third of an inch, so that particles of feces and the fluid may return to the can when the pressure exceeds the desirable tension.

15. Various devices have been resorted to inorder to keep the fluid warm. Thus, there may be employed a tin can covered with asbestos, perforated to allow the passage of the inlet tube, and filled with water. If the water in the can be heated to 105 degrees F. at the beginning of the process, and the can wrapped in a Turkish towel, or its equivalent, the heat will be retained, provided the tube is kept covered with bedclothing.

16. A pint and a half of normal saline solution is given every two hours, and the can is so elevated that about an hour or an hour and a quarter is required for that quantity to flow in if arranged for the drop-method. This means about forty-five drops in fifteen seconds.—New Orleans Medical and Surgical Journal.

Fruit Juices.—In the August number of Therapeautic Medicine, George Dow Scott advises fruit juices in infant feeding. Appreciating the value of fruit juices in infant feeding and in infant life, he is astonished at the unwise and empiric use of drugs and medicines during the first twelve months after birth. Castor oil, calomel and other medicines should be given at this period for a very short time, and only in very small doses. In fruit juices we have an ideal laxative as well as an ideal antiscorbutic. He begins by giving cooked fruit juices to the nursing infant, soon after birth if necessary, and continuing their use until the mother milk shows a proportional amount of proteid, carbohydrate and fat, and normal development of the infant is assured. The use of the fruit juices can be pushed according to the desire, the stools of the infant, the amount of urine excreted, and the general condition of the infant; long after the infant is well the juices can be continued as an efficient mild tonic. Efficient as these juices are to the nursling, the are even more valuable to the bottle-fed infant. Malnourished infants suffering from various disorders are brought back to health with the aid of these juices and a proper modification of milk. In infants suffering or convalescent from bronchopneumonia, lobar pneumonia and other diseases, fruit juices are well borne. They also favor digestive assimilation of foods, the diuretic action of the kidneys. and the cleansing of the enteric tract.—Indian Medical Record.

Substantial Acknowledgement of Crawford W. Long's Priority in the Use of Ether as an Anaesthetic.

The following invitation received by the editor of the Journal-Record of Medicine is welcomed with pleasure, as Long's discovery of ether as an anæsthetic was so long a disputed question. This substantial acknowledgement by such a well-known historic institution will permanently place Long's name among the "immortals" in medicine, where it justly belongs:

The Provost and Trustees of the University of Pennsylvania request the honor of your presence in the hall of the Medical Laboratory Building 37th and Hamilton Walk, at 2 p. m,, Saturday, March 30th, on the occasion of the unveiling of a bronze medallion in honor of Dr. Crawford Williamson Long, 1839, Med. U. and P., who first made use of ether as an anæsthetic for surgical purposes, on March 30th, 1842. Addresses by Dr. J. William White and Dr. J. Chalmers Da Costa. Music by the University Glee Club.—Atlanta Journal-Record of Medicine.

Colored Students.

While the learned professions are assuredly not the place to draw the lines of color or race, our experience compels us to disapprove of mixed classes. The negro, sitting in a white class, imagines he is looked upon askance by his classmates and suspicion is sure to engender this feeling. This detracts from that close attention the study of medicine requires aad the man is unable to do himself justice.

Fof this reason, and since there are well appointed colleges for colored medical students, we advise the latter to resort to their own schools.

Acute Nephritis Following the Injection of Salvarsan.

The untoward events which may follow the administration of salvarsan are almost exclusively associated with the intravenous mode of injection, and it is also possible to argue that many of them (nerve-deafness, for instance) are as likely to be due to the disease as to the drug. However, when all such allowances have been made, there still remains a residue of evidence as to the possible toxicity of salvarsan. Two cases, reported by Dr. H. Tucker, of Philadelphia, in the Therapeutic Gazette for September, go to show that the intravenous injection of salvarsan may speedily be followed by acute nephritis. The first case was that of a man, aged 30, who came under treatment for a hard penile sore with inguinal adenitis. His general condition was good, and his life had been one of uninterrupted health until he acquired syphilis. A week before the injection of "606" was given he presented a characteristic secondary rash. The urine is reported on this same date as containing a trace of albumin and a few leucocytes, but no casts. The Wassermann test was positive. A dose of 0.6 gramme of salvarsan was given intravenously. In an hour the patient was vomiting and the temperature had risen to 101.2° F.; there was a large watery evacuation of the bowels. On the following day there was complete suppression of urine, none being withdrawn even by catheterization; by the evening the patient was very dyspnœic, and by midnight he was dead. No post-mortem examination was made. The second patient was also a fairly healthy man, aged 24; he was poorly developed and took spirits to excess at times, but apart from these facts his condition was apparently normal, except for the evidence of syphilis, which brought him under Dr. Tucker's care. He was in the secondary stage, having already undergone an inadequate course of treatment several months before. The urine was normal, containing neither albumin nor casts. Accordingly, after the Wassermann test had shown a positive result, 0.6 gramme of salvarsan was given by intravenous injection. Two hours later excessive vomiting began, with copious watery motions; the temperature was 105°, but this fell in 18 hours to 96°. No urine was passed, in spite of active treatment, for 24 hours following the injection. The mental processes were clouded and there was fleeting delirium. A specimen of urine collected by catheterization on the day following the injection presented all the features of acute nephritis: blood and casts were found, and the specific gravity was 1030. Within a week, however, all the abnormal constituents had disappeared together with the symptoms. It seems impossible to escape the conclusion, particularly in regard to the second case, that salvarsan administered intravenously can provoke acute inflammation of preuiously healthy kidneys.—The London Lancet.

Combined Iron and Arsenic Treatment.

There can be no doubt that iron and arsenic are two drugs of the greatest value in the treatment of disease, but much depends upon the form in which these metals are given. A preparation which of C. A. Crispolti and M. Marinacci is arsenoferratose, a solution of arsenoferratin, containing 0.3 per cent. Iron and 0.003 per cent. arsenic. It has been used in chlorosis and chloro-anemia and in secondary amemia due to neurasthenia, arteriosclerosis, epilepsy, cardiac neuroses, pneumonia, syphilis, hysteria, etc. Most of the cases had already used other iron and arsenic preparations without the slightest benefit. In one case cited in detail, the number of red corpuscles increased from 2.28 millions to 5.1 millions, a gain of 123.7 per cent. In the least benefited case of the series there was an increase from 4.2 millions to 4.62 millions, a gain of 11 per cent. A decided effect is, as a rule, seen only after two or three weeks. In severe cases it is advisible to keep the patient in bed at first. It is best to begin with a teaspoonful three times a day and to increase the dose to 4 or 5 teaspoonfuls three times a day. The cure requires from two weeks to three months, depending upon the severity of the case. The patients like the preparation, are not troubled with gastro-intestinal disturbances, and other after-effects never appear. The maximum effect is usually seen after two or three weeks, and a tonic action is manifest upon every organ of the body.—La Clinica Medica Italiana.

Syphilitic Neuritis.

Menard states that syphilitic polyneuritis both involves the sensory and motor nerves and is characterized by a combination of motor, sensory, and trophic symptoms. It is more frequent in men than in women. is rare in children, and generally occurs between the twentieth and thirtieth years of life. It occurs generally in syphilis of a benign character, and may begin suddenly by a paralysis of the limbs, of the eye muscles, of the face. The symptoms may also come on rather slowly, being preceded by peculiar sensations of formication, burning, tickling, and pain. In rare cases these are accompained by fever, delirium, and weakness. Strabismus and diplopia are common symptoms. The paralysis is flaccid, the reflexes are diminished or absent, and the reaction of degeneration is present. The symptoms last for some time and disappear very slowly.—Gazette des Hopitaux.

Fatal Case Following Injection of "606."

Mr. H. Moore reported a case of early General Paralysis of the Insane treated by "606," with a fatal result. The patient, aged 25, was given 0.5 gramme intravenously. A severe reaction followed, his temperature rising to 103° F. It was normal next morning, and he left the hospital on the fifth day. Wassermann's reaction, which had been negative before injection, was positive four days after. Six weeks later, his general condition being much improved, but Wassermann's reaction being still positive, he was again given 0.5 gramme. The reaction was very severe, his temperature rising to 105°, with much diarrhoea, vomiting, and general pain. The reflexes, which were all exaggerated before injection, disappeared. He was much better the following morning, but that afternoon he had a second rigor, with rise of temperature to 102°. His general condition became rapidly worse—he got ptosis of the left eyelid, bilateral paresis of the limbs, and difficulty of articulation, and died that night.—Royal Acad. Med. Ireland Lancet.

Pain in the Back.

If one goes over the history of patients suffering from Bright's disease, from stone in the kidney, or from septic iniection of the kidney, it is surprising to note how few cases, if any, have pain in the back; that is to say, pain referred to the vertebral column. In most of these cases the pain is a dull ache or soreness referred to the lumbar region, and in the case of colic it is usually referred along a definite path. So, also, the number of cases of pain in the back, popularly referred to some displacement of the pelvic viscera, is far too great to have any deffinite scientific reason for localizing the cause in that region, and the proof of this lies in the fact that so many of the leading gynecologists of this lies in the fact that so many of the leading gynecoloists of the day are very conservative in their operating on this class of cases — Turner, in the Montreal Medical Journal.

Operative Treatment of Prolapse of the Rectum in Children.

Sack reviews the nine different methods on record for correction of rectal prolapse in children, with the experiences reported to date. All confirm the superior advantages of the latest technic, that published by Sack in 1909, tamponing the retrorectal space. Ritter has modified it somewhat, and Sack reports the details of two cases in which it has been applied with unusually favorable results, the little patients being able to be up and about at once, defecation not being interfered with and re-examination seven and fourteen months later confirming the advantages of this simple and harmless technic. The only incision is made from the tip of the coccyx to the edge of the sphincter. The loose connective tissue behind the rectum is then separated with a blunt instrument up to the promontory, thus detaching the rear wall of the rectum, and a passage is made entirely around its lower segment. A broad strip of gauze is then worked through this passage to encircle the lower part of the rectum and the ends are brought out, crossed and fastened to the skin above the coccyx. A second gauze strip is pushed up between the rear wall of the rectum and the sacrum. The incision is then sutured except at the top where the ends of the gauze emerge. By this means the rectum is enticed to become broadly adherent to the surrounding tissue and the tendency to prolapse is cured. In both his cases the tampons could be removed the fifth day, while the child was allowed to defecate normally from the first, the strip encircling the lower part of the rectum effectually preventing any tendency to prolapse.—Therapeutische Monatschefte.

Ventilation and Children's Health.

Lassabliere and Schatzmann (Ann. de med. et chir.) have made investigations on the effect which the aspect and ventilation of dwelling rooms have upon children's health. They inspected fifteen dwellings occupied by workmen, factory hands, etc., and considered the aspect, the total air capacity of the house and of the children's bedrooms, as well as the methods of ventilating and heating the whole. They also obtained samples of air from the children's rooms in the early morning and estimated the amount of oxygen and carbonic acid gas present in them. The children were also examined with regard to their previous illnesses, and an examination of their blood was made. They conclude that the number of illnesses among children is greater as the amount of cubic air space is lessened; thus in a family where the children had been ill fourteen times the air capacity was one-third of that in other houses where the children were healthy. In such dwellings the blood counts showed a considerable amount of anemia. In bedrooms anything less than 24 cubic feet per child is insufficient, and renders the family susceptible to infectious disease and anemia. A north or southeast aspect appears to be unfavorable. In some cases the open window at night appears to have sufficiently supplemented the want of air space. The rise in carbonic acid was not very high above the normal, but it is probable that long-continued exposure to a vitiated atmosphere will interfere with the oxidation of the child and promote malnutrition.—British Medical Journal.

Salvarsan and Labyrinthine Troubles.

Felix cites many cases treated with 606 in which there have been ear troubles more or less severe. He advances the question whether these troubles have been due to the use of salvarsan, or have occurred in spite of its use as a result of the syphilitic virus. There are cases in which the auditory symptoms existed before the use of salvarsan and others in which the labyrinthine troubles followed the use of the injections. Ehrlich believes that these symptoms are only a recurrence of syphilitic manifestations and not due to the use of arsenobenzol. The author concludes that in order to avoid auditory troubles we should make a very careful examination of the acoustic organs of every patient who is to be injected with salvarsan, and should exclude from treatment all cases that present auditory troubles, treating these cases with mercury —La Presse Medicale.

Ionisation in Ringworm.— Riddell(Glasgow Med Jour.) condemns the use of X-rays in ringworm, as the alopecia which they produce is sometimes permanent. The Dr. recommends ionisation, using a solution of mercuric chloride (one per cent) or of iodine (one per cent.) with potassium iodide. The hair is cut closely or shaved, the solution to be used is rubbed well into the part, and ten to fifteen folds of lint soaked in the solution are applied evently to the surface, overlapping the diseased area. A suitable electrode, such as copper gauze, is carefully adapted to the surface of the lint so that at all points the contract may be equal. Electricity from the public supply, or from a battery of 20 or 30 cells, may be used. The other electrode is connected with a bath of water in which the arm or foot may be immersed. The current is turned on slowly and gradually increased so as not to cause discomfort to the patient. Sittings should be of 40 to 50 minutes, and repeated twice or three times a week. Nine or ten sittings usually effect a cure. He regards the treatment as certain, and rapid, and safe.

Treatment of Phthisis Pulmonalis.—Napier: (Glasgow Med. Jour.) An interesting account is given of the author's experience in cases of pulmonary tuberculosis. Hygienic and dietetic measures receive attention. As regards medicinal treatment, the following routine is adopted; —(1) Thrice daily the administration after food of a tablespoonful of a 50 per cent. cod liver oil emulsion, each dose containing 10 grains of glycerophosphates and 10 minims of pure guaiacol. (2) An inhalation or spray of cyllin. (3) A daily subcutaneous injection of a "Pravaz-syringeful," that is 15 to 20 minims, of sterile almond oil, containing in solution 4 per cent each of iodoform and guaiacol. (4) To control irritative or superfluous cough, that is cough not required for the expulsion of sputum, the following mixture is used:—Dilute hydrocyanic acid, 3 minims; morphine acetate, 1-4 grain; syrup of orange to one drachm. This is to be slowly swallowed, undiluted. at bedtime. Recently the author has been trying the intravenous injection of germicidal substances, the drugs used being solutions of formaldehyde and chinosol. (See Prescriber, 1910, p. 216) The technique of administration and the dosage of the medicaments are carefully considered.

Toxemia of Pregnancy and Hemorrhage.—Colby (British Medical Journal) says that investigation of the records of a series of cases of toxemia of pregnancy at Guy's Hospital during the last eleven years has shown that hemorrhage in one form or another is not a very infrequent symptom of the disease and that in some cases it may be so great as to constitute its principal feature. To his mind, conclusive evidence is shown of the causal relationship between toxemia and this form of hemorrhage. A small group of cases occurred in which hemorrhage, not from the uterus, was so severe as to be a very great source of danger to the patient, and, so far as the author could gather, no similar condition has hitherto been described in association with toxemia of pregnancy. The cases of hemorrhage fall into three groups: I. Hemorrhage from the kidneys. Among the 36 eclampsia cases, hematuria was present in ten, and of these patients, six died. II. Hemorrhage from the uterus. Thirteen patients with concealed accidental hemorrhage were treated, and of these, eight presented symptoms of what was taken to have been toxemia of pregnancy. On the other hand, in 30 cases of external accidental hemorrhage, in only one were signs of toxemia. III. Purpura, and hemorrhage from the mucous membranes. In these cases the hemorrhage was an obvious outward symptom of the disease, and of such an amount as greatly to increase the gravity of the condition, and in one case, to be the principal cause of death. He concludes by stating that from the presence of severe vomiting in each case, of jaundice in patients who recovered and of the very extensive changes in the livers of those who died, that the toxemia was in the main hepatic in origin.

Renal Functions in the Course of Nephritis of Childhood.

Nobecourt and Merklen distinguish several types of nephritis according to the condition of the kidneys with regard to permeability to chlorides and nitrates. In cases where the chlorides are not eliminated there occur edema and anasarca; in those in which nitrogen is not eliminated there occur digestive symptoms. This is true both in acute and chronic nephritis in children. In the chloremic form there may occur pharyngolaryngeal edema, pulmonary edema, hydrothorax, digestive troubles, including vomiting and diarrhea, headache, eclampsia, coma, Cheyene-Stokes respiration, and visual troubles. In the azotemic or uremic form there is no edema but there are loss of appetite, vomiting, torpor, pruritus, etc. The authors distiuguish a simple albuminous form: a chloremic form with scanty urine containing albumin and casts; an azotemic form, with modifications of arterial tension and cardiovascular symptoms; and a combined form with symptoms of both of the other varieties. In the simple form there is no development of uremic symptoms, nor is there a marked change in weight. In the chloremic form, the chlorides being treated, the urea is eliminated normally. As to prognosis, with normal permeability one need not fear accidents; with retention of chlorides alone there are only the phenomena due to edema; with the combined form there are the most intense symptoms indicating grave renal disease or diffuse lesions. The appearance of arterial hypertension and dilatation of the heart is of bad prognostic value. Simple albuminous nephritis may nevertheless cause anemia and cachexia if of long standing. If retention of chlorides continues the prognosis is bad. These cases are illustrated by the pale, cachectic children who succumb to intercurrent diseases. As to treatment, in simple albuminous forms the use of salt and albuminous substance is harmless. In these cases a mild diet, varied with vegetable soup, is of value. In the chloremic form one should give water only for a few days, with lactose. The addition of milk containing salts is not indicated. When the renal function improves a milk diet is given and later meat, eggs, and bread are administered. Lactose and theobromine should be used as diuretics. Milk is the food of choice in nephritis.—Archives de Medecine des Enfants.

Salicylates in Rheumatic Affections.

Voelcker, in a paper on the limitations to the successful employment of salicylates in rheumatic affections, said that it had become a habit to treat all rheumatic affections with the salicylates. Certain of them responded admirably, but there were also quite a number of undoubtedly rheumatic manifestations in which the salicylates proved useless. The most striking benefit of the salicylates was shown in their influence on joint pains, and persistence of pain after adequate administration should always suggest the possibility of the arthritis being gonocoocal or septic in nature, or to the pain being due to an anterior poliomyelitis. The pain of acute rheumatic arthritis ought to yield within twenty-four hours to the administration of 10 grains of sodium salicylate with 20 grains of sodium bicarbonate given every two hours for three doses and then every four hours. Pains about fibrous structures after an acute arthritis were often intractable to salicylates, but yielded to local applications of oil of wintergreen or to potassium iodide internally. The pain of pleurisy and of pericarditis was uninfluenced. Joint effusions when aggravated by movements proved intractable, even when they contained the diplococcus rheumaticus. The pyrexia of acute polyarticular rheumatism was generally controlled within three days, but in the rheumatic state there was often a pyrexia ranging through two degrees, which continued even for weeks, and was unaccompanied by any obvious manifestation of rheumatism. Such pyrexia was often influenced by the salicylates, though it might yield to salol. The employment of the salicylates in rheumatic hyper-pyrexia was waste of valuable time. The cutaneous manifestations of rheumatism were uninfluenced. Neither the various forms of erythema, purpura, nor erythema nodosum appeared to be influenced, and these manifestations had occurred while patients were actually taking the drug. The subcutaneous nodules described by Barlow and Warner were undoubtedly rheumatic in nature, but they were quite uninfluenced by the administration of the salicylates. He had failed to find any successful treatment for them. The similarity of their structure to that of the inflamed valves of the heart in rheumatism, as pointed out by Cheadle, was a powerful argument against the utility of the employment of salicylates in endocarditis or pericarditis. The danger of upsetting the stomach with the irritant salicylates must be borne in mind in the treatment of all heart affections, as also must the risk of acidosis.—Brit. Med. Jour.

Late Epilepsy.

Migliucci has seen a number of cases in which epilepsy, not of the Jacksonian type, came on in later life, that is after thirty years of age, without any history of injury. These are cases similar to those that occur in earlier life, with the same form of attacks, and the same course. The author questions whether these attacks are not caused by syphilis. There can be no doubt that in some of these cases syphilis is the etiological factor, and the author questions whether this is not always the case. In young children epilepsy has for its cause some radical defect in the psychocerebral development by virtue of which the child does not react normally to its environment. Alcohol in itself would not cause epilepsy if there were not at its basis a disturbance of the nutrition of the nervous system. A syphilitic intoxication aside from any lesions of the nervous system may act as a cause of late epilepsy. In some cases there are lesions of the vessels of a syphilitic nature, giving conditions which may be placed midway between cerebral syphilis and general paresis. Some authors liken these disturbances to the appearance of the secondary skin symptoms, and think that they take their place, being due to infiltration of the meninges with syphilitic new tissue growth, the infiltrations being so small as not to be visible except to the microscope. Syphilis in a predisposed individual has been the last factor to cause cerebral irritation and the manifestation has been an epileptic one.—Giornale Internazionale delle Scienze Mediche.

Non-Tuberculous Hemoptysis.

Gabel and Gigoux have observed many cases of small repeated hemorrhages which are not necessarily caused by pulmonary tuberculosis. These hemorrhages do not consist of pure blood, but consist rather of blood-streaked mucus which appears after some slight effort such as clearing the throat. In these cases not only should the lungs be carefully examined but also the pharynx, larynx, trachea, and base of the tongue. In most instances the bleeding is found to come from small varices at the base of the tongue. Galvano-cauterization of these spots will effect a cure. The varices are especially apt to be found between the ages of 40 and 50 years in women, in whom there are also found varicose veins of the leg or hemorrhoids. Small hemorrhages also result from congestion or inflammation of the pharynx, larynx, or trachea, occurring in Bright's disease, cirrhosis of the liver, and non-tuberculous pulmonary disease.—Lyon Medical.

A New Cell Proliferent.

Bramwell makes the following note on common comfrey: An interesting question was raised at a recent meeting of the Liverpool Medical Institution when Dr. Macalister introduced the subject of a long forgotten remedy—the symphytum officinale or common comfrey—which once held a prominent place in the medical armament of the older writers. Dr. Macalister has wisely had this singularly efficacious remedy analyzed and Dr. Titherley and Mr. Coppin (of the Chemical department of the Liverpool University) have discovered that the root is rich in allantoin, which they found to be a "potent cell proliferent." I have, on more than one occasion, cured old ulcers which have resisted other treatment, by the simple extract from the root applied on lint to saturation. After a few hours this dressing, in favorable cases, sets quite hard, and can only be removed by the lengthy application of water, which is often more tedious and painful than the average patient, who has been in the habit of applying some simple dressing, cares to endure. This hard setting acts, in some measure, like strapping drawing the edges of the ulcer towards one another, but probably much more evenly and accurately than the most skilful strapping could effect. This looks as though the cure is wrought similarly to healing under a scab. One patient, an old gentleman of gouty diathesis, who will not diet or take medicine, finds the nightly application of the mucilage of symphytum the only remedy of the many he has tried which gives him any relief for pruritus ani. His sufferings, at one time were so intense that he says he could not sleep for weeks together. I judge the explanation of its efficacy in the case to be very simple. When the mucilage is taken into the mouth there is a sense of dryness, due to some astringent principle, probably tannin; at the same time, if the air be drawn in, there is a sensation of coldness and numbness much like that felt after peppermint, though in a lesser degree, but without the previous burning sensation and hence it is slightly anæsthetic. In pruritus ani, these two principles acting together, the one driving back the acid-laden blood, the other soothing the irritated nerve endings, will, I think, account for the relief which is felt in this troublesome complaint. Acting on this principle, I have frequently used it internally as a last resource where more elegant preparations have failed—for example, in gastralgia when I have believed this to be due to an irritated gastric mucosa, and to ease the pain of and to cure gastric ulcer. In these cases its efficacy has been much more wonderful than its effects in external applications in cases like the above; and here, too, its cell-proliferating capabilities, which Dr. Macalisters' colleagues have discovered, will be a large factor in promoting the growth of new mucous tissue over the irritated and congested surface of gastric ulcer. It is indeed refreshing and gratifying, in these days of serums and vaccines and highly complicated preparations, the administration of which in some cases is fraught with the gravest possible danger and soul-harrowing anxiety on the part of the administrator, to find a physician of Dr. Macalister's standing setting on foot the investigation of so simple and natural a remedy as common comfrey.—Brit. Med. Jour.

News Items from the University College of Medicine, Richmond, Va.

At the annual meeting of the Board of Trustees of the University College of Medicine, May 23, 1912, several changes were made in the Faculty by reason of resignations, removals, etc. Dr. Paulus A. Irving, removed to Farmville, Va., was made emeritus professor of pediatrics.

Dr. Jacob Michaux resigned the chair of obstetrics, and was made emeritus professor of obstetrics.

Dr. John F. Winn, for several years professor of clinical obstetrics, was elected professor of obstetrics. Dr. Virginius Harrison was made associate in the same chair.

What Caused the "Titanic" Disaster?

The two main questions in which not only the investigating committee were interested, but which vitally concern the traveling public of the world, are: (1) Who is to blame for this appalling disaster? (2) What precautions can and should be adopted in the future against a repetition? It does not seem possible to prove criminal negligence. Rather, it is already evident that the disaster was due to three causes: the faulty system of regulation of ocean travel for which the governments of the United States, Great Britain, France and Germany must, to a degree, be held responsible; the ever-increasing competition of most of the larger steamship lines to provide larger and faster vessels in which, of late years, the luxuries and elegances of travel have crowded out the appliances for safety, and the craze for speed and luxury demanded by the public and supplied by the steamships in response to the demand. Admiral F. E. Chadwick, in a letter to the New York Evening Post, the day after the tragedy, summed up the situation when he said:

The Titanic was lost by unwise navigation, by running at full speed, though so

Summer Ailments

involving the gastro-intestinal tract or the circulatory system, are especially amenable to

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This well-known remedy has the great advantage of never being contraindicated during the heated season, as are cod liver oil and many other tonics. Therefore, it may be given throughout the year without a question as to its therapeutic fitness.

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amply forewarned, into the dangerous situation, which might easily have been avoided. This is the fundamental, sad, and one important fact. It accounts for everything.

When she struck the iceberg, the Titanic was going at the rate of 21 knots (24½ miles) an hour, despite the warnings already given by passing ships of the presence of icebergs, and also despite the fact that the standing instructions of the White Star line to its captains are that they are to "run no risks"; that "the safety of lives of passengers is the ruling principle"; and that "it is the earnest desire of the management to ensure a reputation for safety." These were the rules, but how often an appalling disaster has shown how easily custom establishes many unwritten laws that over-ride printed instructions! As one editorial writer has pithily put it, "not a single life on the Titanic was saved by the tennis court." Despite the great and expensive precautions taken to render the ship unsinkable,—which the passengers to their destruction devoutly believed to be true—the great amount of space taken up for luxurious appointments resulted in an insufficient number of lifeboats, and the "unsinkable" ship now lies two miles below the surface of the Atlantic.—From "The Progress of the World," in the American Review of Reviews for June.

Treatment of Backward Children by Associated Glandular Extracts.

Dupuy believes that he has reached valuable results in securing the development of backward children by the use of a combination of the extracts of thyroid, suprarenals, hypophysis, and genital organs, in cases in which thyroid medication alone was disappointing. This treatment causes an increase in height and weight, sensorial and psychic cevelopment; an increase in arterial tension, urinary elimination, and metabolism, and a disappearance of morbid phenomena such as enuresis and ocular troubles. This condition results from the presence of syphilis, tuberculosis, alcoholism, or malaria in the antecedents, the acute and chronic infections of pregnancy, premature delivery, overwork and privations of the mother, bad feeding and infantile maladies.—Journal de Medicine de Paris.

Electricity and Animal Growth.

The experiments carried on by Sir Oliver Lodge, near Evesham, to test the stimulative effects of electricity on growing crops are fairly well known, and the results, so far as certain forms of vegetable life are concerned, have been satisfactory, a considerable addition to the yield have been secured by the use of electric currents set up by overhead wires. These observations suggested that electricity might be found equally stimulating to animal growth, and in the official Journal of the Board of Agriculture reference is made to experiments on these lines carried on by Professor Silas Wentworth of Los Gutos, California, at his experimental farm on a ranch near Roseville. The report states that a flock of 2,000 sheep was divided, one-half being placed in a field under the power wires of an electric wire company, while the other half were removed from electric influences. In the field under the electric power line the production of lambs averaged a fraction over two lambs to each ewe. In the adjoining field where electrical influence was lacking the lamb average was rather less than one to each ewe. The fleeces from the sheep in the electrically influenced field proved 20 per cent. heavier. Professor Wentworth thus claims that the electric influence on animal life "will more than double the production of lambs and generally increase the yield of wool."—British Medical Journal.

State Board Examination Questions of South Dakota.

ANATOMY, EMBRYOLOGY, AND HISTOLOGY.

1. What are the distinctive types of embryonal cells? In the formation of what part of the anatomy is each type mainly concerned?

2. Describe briefly the histological structure of the kidney.

3. Name the principal subdivisions of the lymphatic glands of the head and face and give their respective location.

4. Give origin and distribution of the great sciatic nerve.

5. Name the extensor muscles of the foot, give origin and insertion of each.

5. Where is the circle of Willis? Name the component parts.

7. Name the branches of the radial artery in the forearm.

8. What structures would you sever in making an amputation of the arm midway between the shoulder and elbow?

9. Describe a dorsal vertebra.

10. Give the nervous supply of the heart.

PHYSIOLOGY.

1. Describe the glands and villi of the intestines.

2. How is heat produced in the body?

3. Describe cholesterin, and state where found, and also its function

4. Mention some of the ductless glands.

5. What is the function of the retina?

6. How is the sensation of sound conveyed to the brain?

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Be sure to specify

7. What exercises injuriously affect the heart? And why?

8. What is the normal ratio of heart pulsation to respiration?

9. Give some examples of morbid reflex action.

10. Give the reaction of the following fluids, and state the cause of the reaction: (a) gastric juice, (b) urine, (c) pancreatic juice, (d) blood.

CHEMISTRY.

1. Give chemical formulæ for common salt, nitrate of silver, sulphuric acid, hydrochloric acid, and nitric acid. (b) Complete following:

HCl plus $CaCO_3$ equals
Zn plus H_2SO_4 equals
Ba plus $2HCl$ equals

2. How would you test for hydrochloric acid in gastric juice? (b) Give a test for lactic acid. (c) What are the normal limits of total acidity and free hydrochloric acid in gastric juice?

3. Give commen names and properties of mercurous chloride, corrosive sublimate. (b) Mention two easily applied tests that will distinguish one from the other. (c) How would you treat a case of poisoning from the latter?

4. Define specific gravity. (b) What are the normal limits of the specific gravity of urine? (c) How would you determine the total amount of solids in the urine, knowing the specific gravity?

5. Give the characteristics of the urine in diabetes mellitus, cystitis, and chronic parenchymatous nephritis. (b) Give and describe a reliable test in each case.

PATHOLOGY.

1. What is the pathology of acute lobar pneumonia? How does it differ from bronchopneumonia?

2. Give the pathology and diagnosis of typhoid fever. (b) What connection has typhoid fever with the formation of gallstones?

3. Give the pathology of osteomyelitis.

4. Differentiate pathologically between a typhoid ulcer and a tubercular ulcer of the intestine.

5. What is pathological leucocytosis? (b) Name three physiological conditions which produce leucocytosis.

6. What is ascites and state its causes?

7. Differentiate pathologically between osteomyelitis and inflammatory rheumatism.

8. Differentiate between fatty degeneration and fatty infiltration.

9. What is meant by metatastic growth?

10. Give the pathology of parenchymatous nephritis.

BACTERIOLOGY.

1. Describe the technique of making a microscopic examination of urethral pus for gonococci.

2. What is (a) an antitoxin? (b) A bacterial vaccine?

3. What do you understaud by the term anaphylaxis?

4. How would you make a culture from a throat in a suspected case of diphtheria? Describe the growth as it appears on the culture media. How would you stain the bacteria? What is the appearance of the diphtheria bacillus under the microscope?

5. A dealer in hides has a carbuncle on the back of his hand. Tell how you would make and grow a culture for diagnosis. Describe briefly the organisms you would expect to find.

THERAPEUTICS AND PRACTICE.

1. What do you understand by cardiac insufficiency? Give some causes and symptoms.

2. How would you treat a case of lobar pneumonia during the first twenty-four hours of the disease?

3. Give causes, symptoms, and treatment of acute anterior poliomyelitis (infantile paralysis). Would you quarantine the patient? If so, for how long?

4. If a patient came to you complaining of "indigestion, distress, and pain in the stomach" how would you proceed to make a diagnosis? What questions would you ask? What physical examination would you make?

5. Give full directions to the patient and family for the care of a case of pulmonary tuberculosis in the home.

6. Give directions for the artificial feeding of an infant.

7. Give diagnosis and treatment of pleural effusion.

8. Name the chronic systemic diseases in which skin lesions are of diagnostic value. Give the characteristic lesion of each disease.

9. Give symptoms and physical findings in a case of exophthalmic goiter.

10. November 1, 1911, A. B., a real estate agent, twenty-six years old, gave the following history: Scarlet fever when two years old. Ten years ago had a mild attack of tonsillitis; at this time his physician told him he had albumin in his urine. Since that time he has had his urine examined frequently, and traces of albumin were always present. September 10, 1911, he was exposed to a cold rain, "caught cold" which was followed by capillary bronchitis. He has coughed ever since, raising small amount of white tenacious mucus streaked with blood. He has felt tired and weak,

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but ate and slept fairly well until four days ago, when breathing became difficult;could not breathe when lying down. When first seen he was sitting in his chair, leaning forward with his head on the table. Breathing labored; thirty times per minute. Harsh respiration over both lungs. No rales. Pulse 130. Apex beat two inches to left of nipple. Soft systolic blow over base of heart. Arteries of temple prominent and tortuous. Blood pressure 180 mm. Hg. Feet and ankles slightly edematous. Liver one inch below costal arch. Spleen not palpable. Urinary examination showed specific gravity 1008, large amount of albumin, numerous casts, hyaline and granular. What diagnosis would you make in this case? Give treatment you would institute. What prognosis would you make? What other data would you need to complete the history?

OBSTETRICS.

1. Diagnose pregnancy in early months.

2. Give treatment of pernicious vomiting of pregnancy.

3. Name stages of normal labor.

4. What would you do for puerperal eclampsia?

5. Give management of adherent placenta.

6. Diagnose placenta prævia and give method of procedure.

7. How would you control postpartum hemorrhage?

8. Give indications for forceps.

9. How would you manage a case of shoulder presentation?

10. Treat a case of inevitable abortion.

GYNECOLOGY.

1. Define endometritis. Give varieties, cause, and treatment.

2. Describe and treat a case of prolapsus uteri.

3. What organs are usually affected in gonorrhea in the female? Describe and treat a case.

4. What conditions do you think of that might cause sterility that are susceptible to treatment?

5. What can you say about the hygiene of puberty?

SURGERY.

1. Give diagnosis and treatment for case of indirect inguinal hernia.

2. Give diagnosis and treatment for acute appendicitis.

3. What is Lane's kink? Give treatment for same.

4. Give etiology, diagnosis, and treatment for empyema.

5. Give treatment for varicose veins of leg.

6. Diagnose and treat fracture of clavicle.

7. Discuss briefly the use of Lane's bone plates, giving indications and contraindications for their use.

8. Give in detail your treatment for incised wound of scalp.

9. Give diagnosis and treatment for downward dislocation of shoulder.

10. Discuss briefly (a) ether; (b) chloroform; their administration and dangers of each.

EYE, EAR, NOSE, AND THROAT.

1. What do you understand by the following: Hypopyon, Argyll-Robertson pupil, mydriasis, presbyopia, ptosis?

2. (a) Treat a case of severe corneal ulcer. (b) Treat a case of severe iritis.

3. Give two indications for use of atropine in eye.

4. Give technique for removal of foreign body imbedded in cornea.

5. Diagnose and treat a case of ozena.

6. Give symptoms and treatment for hypertrophied turbinate.

7. What is your treatment for a child of ten years who often has discharge from ears and habitually breathes through the mouth?

8. Patient presents with following history: Age 25, three weeks ago had severe attack of la grippe, since which time there has been a great deal of frontal headache aggravated by stooping forward or blowing nose, discharge from nostrils, temperature 100°, marked tenderness along the supraorbital ridge, eyelids somewhat puffy. What is your diagnosis and treatment?

9. Describe thoroughly your method of examination of patient complaining of loss of hearing.

10. Treat a case of chronic laryngitis.

SKIN AND GENITOURINARY.

1. Give causes for orchitis and treatment for same.

2. Name stages of syphilis.

3. Diagnose and treat acute cystitis.

4. Describe acne.

5. Write a page on eczema.

HYGIENE AND SANITARY SCIENCE.

1. Trace the entrance of (a) typhoid; (b) tuberculosis into the system.

2. Give in detail an effective method for controlling an epidemic of diphtheria.

3. Describe the method of making examination of school children for infectious diseases and general defects.

4. What is antitetanic serum? and give uses for same.

5. (a) Give method for pasteurizing milk. (b) Name two diseases commonly carried by means of milk.

MEDICAL JURISPRUDENCE.

1. Describe rigor mortis and tetanus.

2. What is the order of occurrence of rigor mortis in different parts of the body?

3. If summoned to view the dead body of an infant, how would you determine whether it was mature, and whether it had been born alive?

4. How would you determine if a woman had died from the effects of a criminal abortion, at about the third or fourth month of pregnancy?

5. Define (a) delusion, (b) hallucination, (c) illusion.

Beware.

Gustav Gebauer, formerly a reputable bookseller, having obtained one of my order books, is collecting money from physicians in Georgia, North and South Carolina. None of these orders reach me and I am in no way responsible for them.

W. M. Leonard, Publisher.

Arthritic Diseases on the French Mediterranean Littoral.

Sardou gives the reasons for the value of a sojourn on the seacoast of the Mediterranean in the south of France, which region has an effect quite similar to that of American southern climates in the treatment of arthritic diseases. This climate is at once stimulant, eliminant, and protective. The warmth of the weather even in winter is such as to induce the patient to spend a great part of his time out of doors, at a season when he would be obliged in a Northern climate to stay in the house to protect his joints from the assaults of cold. Exercise in the open air induces increased elimination by means of the skin, and the action of the kidneys is increased, while the bowels act better. The bright sunshine induces a better mental and psychical state at the same time. The increased elimination enables the patient to get rid of the poisonous compounds which are causing the joint symptoms. In this the increased circulation is a great factor, while all the internal organs are stimulated to action by it. Appetite is better; the liver, stomach, and intestines all functionate better; the nervous system becomes more normal; and the glands of internal secretion increase their secretions. The dryness and purity of the atmosphere and its luminosity, the combined influences of sea and mountains, the brilliant sun and the vegetation, together with the change of surroundings and of scene all act favorably upon the nervous system of these semi-invalids.—Bulletin General de Therapeutique.

Anaphylaxis and Cow's Milk.

Finizio (La Ped.) records four cases of marked idiosyncrasy to cow's milk, two of the cases occurring in one family and three being congenital. The amount of milk necessary to cause symptoms of anaphylaxis was very small, in each case varying from 20 grams to 120 grams. The symptoms set in rapidly, rarely later than three hours after ingestion, beginning usually with vomiting, followed by frequent liquid, green stools and some rectal tenesmus; occasionally the stools were bloody. In addition certain spasmophilic symptoms set in (tetany, convulsions), and these might persist for long periods after the acute gastrointestinal symptoms had disappeared. The temperature was raised in three out of four cases. The acute symptoms disappeared with considerable rapidity—that is, the collapse dyspnea, vomiting and diarrhea—but the fever and spasmophilias persisted for some time. Examination of the blood serum of two of the cases showed distinct precipitin reaction with cow's milk, and in the fourth case there was a diminution in the complemental power of the serum, which tends to prove the existence of a condition of anaphylaxis in these cases. In one of these cases there was a history of maternal tuberculosis; possibly this may have some bearing on the predisposition to anaphylaxis. On the theory that the heterogeneous protein introduced was the cause of the symptoms, the milk was predigested, but without any obvious good effects. On the other hand, milk serum (given as a kind of vaccine) seemed to have a beneficial effect. At present we know only a little about anaphylaxis, but if these cases of intolerance to cow's milk prove to be examples, the study of them may, as the author believes, throw a little further light on this obscure subject.—British Medical Journal.

The Viscosity of Blood in Disease.

Plessi and Vandini state that the viscosity of the blood depends on several factors; among these are the morphology of its cells, the plasma, the quantity of hemoglobin, the amount of globulin in the serum, etc. The authors experimented with patients affected with various diseases and with normal individuals as well. They found that hirudin is the best agent for lessening viscosity. In anemias the viscosity of the whole blood is decreased. In pulmonary inflammation the viscosity is less than normal. In intestinal infections and in abdominal carcinoma it is diminished. In pulmonary tuberculosis it is increased in the early stages, and when cachexia has developed is normal.—Rivista Critica di Clinica Medica.

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Chronic Prolonged Angina Due to a Staphylobacillus.

Perquis and Cheverel present the history of a case of prolonged sore throat lasting for some nine months, in which there was every local appearance on the tonsils of a diphtheritic membrane, but without general spmptoms. Applications of antiseptics caused the membrane to be absorbed, but it soon reformed. Antitoxin given repeatedly did not produce any curative effect, although symptoms of anaphylaxis developed. The bacteriological examination showed no Klebs-Loffler bacilli, but revealed an organism that was Gram positive, slightly virulent to the guinea-pig, and that was a white staphylobacillus. This same organ has been reported by several other authors as causing angina. It was found in the throats in two cases of meningitis, one tuberculous, and the other caused by the meningococcus; in the intestinal mucus of a case of enteritis, and in the blood of one case of septicemia. It probably resides generally in the intestine. Systematic examination of all cases of pharyngitis might show this germ frequently present in chronic sore throats.—Gazette des Hopitaux.

Clinical Value of the von Pirquet Reaction in Children.

Merioz and Khalatoff tested 337 children in the Children's Hospital, Geneva, by means of the von Pirquet reaction. They got 175 positive results, that is 51.9 per cent. of the total. Of 189 clinically tuberculous children 143 reacted positively; of 78 non tuberculous children clinically, there were 29 positive reactions. The authors believe that the conjunctival reaction is not safe in children and that the cuti reaction is both safe and valuable as an aid to diagnosis. In an infant a positive reaction is rare, and gives informatihn of great value. The nearer the child is to the adult age the greater likelihood is there of a positive reaction. In pneumonia with tuberculosis and in tuberculous meningitis the reaction may be negative just before death. In all negative cases a second test should be made.—Revue Medicale de la Suisse Romande.

Value of the Wassermann Reaction in a General Medical Service.

Weill tested all the patients who entered his medical service during six months with the Wassermann reaction. None of these patients came in on account of florid syphilis, and all syphilitic cases were supposed to have been sent to another clinic. The patients tested were 225 in number; of these 64 reacted positively to the Wasserman test, that is, 28.44 per cent After the positive test they were carefully questioned as to their previous illnesses and in all cases they admitted having had syphilis. There were among these patients cases of visceral sclerosis, diabetes, bronchial dilatation, aortic dtlatation, neoplasms, icterus, cerebral hemorrhage and softening, tabes, general paresis, amyotrophic lateral sclerosis, Jacksonian epilepsy, meningomyelitis, and other nervous phenomeny. The author's results give a valuable demonstration of the value of the Wassermann reaction in general medicine. This reaction allows one to recognize many cases of syphilis that would not be otherwise detected, and to treat them properly. It shows the terribly disastrous effects of the disease and the profound mental and moral decay that it causes. Nearly all the nervous maladies of organic form seem to be due to syphilis.—Journal Medical de Bruxelles.

Dosage and Toxicity of Camphor.

Lemaire writes that camphor may be used internally as a stimulant, cardiac tone, nervous excitant, antispasmodic, diaphoretic, antiparasitic, bactrricide, antitoxic, antigalactogogue, and anaphrodisiac. Externally it may be employed as an analgesic, antiseptic, and local stimulant. The dose in adults varies from 0.10 to 1 Gm. hypodermically, 0.50 Gm. per diem in divided doses. In children the doses are as follows: 0.005 to 0.01 Gm. to 15 months, 0.01 to 0.05 Gm. from 15 months to 3 years, from 0.05 to 0.10 Gm. from 3 years to 5 years, and 0.05 to 0.15 Gm. from 5 to 10 years of age. In tuberculosis it is useful in certain acute forms with febrile complications, and in chlorotics and anaemic persons in injections of 1 c.cm. of oil, increasing every day by 1 c.cm. Seibert recommends it in pneumonia every twelve hours in injections of 12 c.cm. of oil of camphor 20 per cent., and in pneumonias of old people daily injections of 5 c.cm. of the oil (20 per cent.); these doses may be increased to 15 to 20 c.cm. Wurtz recommends every three hours injections of 0.50 to 1 c.cm. of the oil in alimentary intoxication. In peritonitis it has been found successful in injections into the abdominal cavity of 100 to 300 Gm. of the oil (1 per cent.). In surgical infections and postoperative shock a dose up to 100 Gm. of the oil in twenty-four hours has been injected with success. In man the signs of toxicity are excitement, continual desire for movement, headache, buzzing in the ears, delirium, dimness of vision, vertigo, and hallucinations, and, if the dose is sufficient, somnolence, amnesia, paralysis of the bladder and rectum, coma, and in some cases death. In some cases the stage of excitation is missing. Hyperleucocytosis, increase of the bronchial secretion, sweating, and polyuria have been noticed. The respiration is quickened during the excitable stage, and later becomes slowed when convulsions may or may not occur. Many cases have been noted of convulsions after poisoning by this remedy.—British Medical Journal.

Epileptoidism.

S. de Sanctis has made a study of 70 cases of a condition which he characterizes as epileptoidism. He describes this as a state in which there is great changeability of the feelings, especially in a hostile direction; nervous hyperexcitability; rapid and explosive reactions without sufficient cause, accompanied by anger, and not followed by somnolence; amnesia; involuntary micturition; refractoriness to work either physical or mental. The patients are not helped by bromides. There are poor sleep, hypoalgesia of the skin, slight functional motor alterations, spasm, retarded right-handedness and ambidexterity, mental insufficiency, criminal tendencies, and dipsomania. —Rivista Ospedaliera.

The Preponderating Role of Perversions of Instinct in Mental Maladies.

Berillon divides all human instincts into four orders: instincts of nutrition, of conservation, of sociability, and of reproduction. All mental maladies result from derangements of these instincts. If one of these instincts is disarranged there results a loss of mental equilibrium. An obstacle to the satisfaction of an instinct causes a profound effect on the intelligence and sensibility. In any psychopath one should endeavor to find out the most marked imperfection in the realization of the instincts. The abnormal way in which he goes about the satisfaction of the instincts shows the psychopathic predisposition of an individual. There is an exaggeration or a lessening of these instincts; changes in nutritional instincts cause anorexia and sitophobia, gluttony, voracity and bulimia. Abnormalities of conservation cause impulsion to suicide, or anxiety and hypochondriasis. They may also cause parsimoniousness or prodigality. The social instinct when perverted causes sanguinary brutality or absurd sentimentalism. That of reproduction causes erotomania, heterosexual jealousy, or homosexual degradation. Among neuropaths, however serious be their functional troubles, the instinctive dispositions preserve their normal tendencies. There are no alterations or perversions of instincts. This is the means of differential diagnosis between psychopathies and neuropathies.—Gazette des Hopitaux.

Treatment of Condylomata Acuminata—Watson (The London Lancet) says that the treatment which has been found to be most simple, effective, and free from objection is the application of lactic acid. The mode of employment depends upon the condition present. In the male, circumcision is performed when necessary, pedunculated warts may be removed with scissors, and pure lactic acid is applied to the base after the bleeding has been controlled. Other growths are treated with a continuous 1 per cent. wet dressing or the occasional application of a strong solution. In the female, when there are several large masses, each portion is isolated and kept surrounded by strips of lint wet with a ½ to 1 per cent. solution. The base of these growths may in addition be touched at intervals of a few days with the pure acid. Smaller growths are painted with the undiluted acid or a strong solution, and when there is a large field of minute growths the wet dressing is emploped. The dressings are changed as frequently as the amount of discharge necessitates, and at each change the parts are thoroughly bathed with an antiseptic, in the case of females a sitz bath being used. The largest masses wither and drop off, small growths are inhibited, and cure results without the formation of any cicatrices and without pain. The only disadvantage the author has encountered in the use of lactic acid is the occasional occurrence of a general erythema when the treatment is pushed too energetically. This erythema is of trifling significance and quickly subsides on the temporary withdrawal os the acid and the substitution of a zinc and calomel dusting powder or ointment. On this account, however, it may be necessary when large areas are involved to intermit the treatment for two days in each week, and to protect the surrounding healthy tissues with vaseline in order to discourage excessive absorption of the acid. As soon as the seats of gonorrheal infection—urethra, cervix, rectum, etc.—can be reached appropriate treatment is initiated, and this,combined with strict cleanliness, has an important influence in preventing the appearances of fresh growths.

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Dr. Richard V. Taylor, Jr., of Mobile, Ala., and Miss Anne Russell Sampson, of Charlottesville, Va., were married on June 11th.

Dr. Taylor, who graduated at the University of Virginia, has been for two years at the Postgraduate Hospital in New York, where he has done splendid work and from which hospital he finishes as house-surgeon the first of June.

Dr. Taylor and his bride will sail in September for China. Dr. Taylor going as the foreign representative from his alma mater, the University of Virginia, to do medical and surgical service over there. He will join his brother, Dr. Adrian Taylor, who has been in China for several years, at Yang Chow.

Dr. William Thaddeus Dickert died at his home in Newberry, S. C., on May 2nd, after an illness of three days, at the age of 42 years.

Dr. Dickert was a skillful physician and a good man.

Dr. J. T. Riley, a well-known and prominent doctor of Orangeburg, S. C., died at his home on May 21st, after an illness of some months. Dr. Riley has been in bad health for some months. He was about 50 years of age.

Dr. Ben F. Royal, who has for some months been the very proficient surgeon at the Shelby Hospital, Shelby, N. C., has resigned as such and will return to his home in Morehead City, N. C., where he has a lucrative practice awaiting him.

Dr. Harlan Shoemaker, who was with the hospital until a few months ago, and who resigned to take up the work at a hospital in Jersey City, will take this work again with the hospital in Shelby, having given up the Jersey City practice, and been for some time in Philadelphia.

On May 17th the first class of nurses was graduated from the Washington Hospital, Washington, N. C. The class was composed of six young ladies.

The physicians at the head of this institution are doing a great work, and it is one of the best managed and conducted institutions in this section of the country.

Those who received diplomas were: Misses Josephine Leggette, Annie Bell, Nellie Whitley, Washington, N. C., Kate Conley, Bennie Conley, Crews, Va., Bertha Edwards, Speed, N. C.

Dr. Bertie O. Edwards, of Landis, N. C , and Miss Zelia Corriher, of China Grove, N. C., were married on May 22nd.

Dr. W. E. Pinson, a well known physician, died at his home in Cross Hill, S. C., on May 18th. Paralysis was the cause of his death.

Chaulmoogra Oil in Leprosy.

Sandes writes that the chaulmoogra oil treatment, although slow and at best not very satisfactory, is still superior to any other remedy that we know. He emphasizes that the use of the oil must be prolonged, five years or more; it must be as far as possible continuous, and the imbibition of the oil should be pushed gradually to the extreme of receptivity. Relapses will undoubtedly occur, particularly in the earlier stages, but such should not be permitted to foster discouragement. To expect sudden amelioration is to look for disappointment. Surgical assistance should always be ready to intervene where natural processes or medical applications have failed in discarding devitalized tissues or opposing inflammation.--Jour. Trop. Med. and Hygiene.

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Link the Past with the Present.

J. Marion Sims many years ago said, "For severe Dysmenorrhea I have found Hayden,s Viburnum Compound of great service."

What was true as to the therapeutic value of Hayden's Viburnum Compound in the time of Sims is just as much of a fact today. As a remedy in the treatment of Dysmenorrhea, Amenorrhea and other functional irregularities of the uterus and its appendages, H. V. C. is dependable in action, and as it is of known composition and contains no narcotics it is safe to prescribe.

As a uterine tonic and antispasmodic it is of particular service, and to any physician who desires to clinically demonstrate its therapeutic action samples and literature will be forwarded upon request to New York Pharmaceutical Co., Bedford Springs, Bedford, Mass.

Labor After Anterior Hysterorrhapy.

Schauta (Monatsschrift fur Geburtshulfe and Gynakologie,) gives his views on the question of radical interference in cases of labor occurring after fixation and suspension operations on the uterus and from a consideration of all the factors concerned, believes that we should be less ready to interfere in a radical manner than has hitherto been the custom. The Dr. thoroughly studied the literature of the subject and claims that in a great many cases anterior traction on the cervix will result in bringing the os into the axis of the birth canal and favor delivery by natural means. In cases where this is not successful, a sagittal incision of the anterior lip of the cervix is sufficient. This procedure is particularly indicated in vaginal fixation, as the bladder is sufficiently high in these cases to be above the pelvic brim. In a ventral fixation the bladder occupies a much lower position and must therefore the incision in the cervix is made. In a large proportion of these cases, the fetus lies in a transverse position, because the development of the uterus in its long axis is prevented, but there is nothing to stop its growth in a lateral direction. A version therefore is indicated followed by a breech extraction. Schauta belives that the elastic bag affords a favorable means of dilating the cervix in ventral suspension cases and aids in bringing the oz into the line of the birth canal. Craniotomy is only indicated werer the fetus is dead and the pelvis deformed. Referring to the large number of cases in which abdominal Cesarean section has been done, Schauta considers that in most instances this has been unnecessary and that a restriction should be made in the application of this operation.

The CHARLOTTE SANATORIUM

LABORATORY-DEPARTMENT

CHARLOTTE, N. C.

The Main Building Front View.

The attention of the physicians and surgeons is called to the advantages which this institution offers in methods of laboratory diagnoses.

Many physicians through lack of time, technical training or laboratory equipment find it difficult to utilize the many methods of microscopic and clinical examinations so essential to a proper diagnosis.

To the physicians and surgeons of the Carolinas and Virginia, the Charlotte Sanatorium Laboratory offers, at moderate cost, facilities for such examinations. Animal inocculation, chemical, bacteriological and histological examinations will be made as the case requires.

The following directions are suggested for the benefit of those who may forward material for examination.

All specimens should be accompanied by a brief note descriptive of the clinical condition and a special reference to the character of the examination desired. The name and address of the person to whom the report is to be sent should be clearly indicated.

Seventh Street Entrance.

Sputum—should be sent in a clean, wide-mouthed bottle. The ordinary vaseline bottle answers all purposes. The morning sputum is preferable. That expectorated during meal time should not be included.

Blood For Widal Test.—After carefully washing, prick the lobule of the ear or the tip of the finger. The first drop of blood should be wiped away. Two large drops are then placed on a glass slide, one near either end, and allowed to dry without being spread out on the suface of the slide. After they have dried, the

slide is carefully placed in a clean envelope and box, and then mailed to the laboratory.

Second Method.—Collect three or four drops of blood in a capillary tube; then seal tube over gas or other flame and send to the laboratory. (Capillary tubes will be sent upon application to the laboratory.) Blood for malarial parasites differential count. etc., should be sent to the labaratory on glass slides. As thin a smear as possible should be made.

Clinical Laboratory, Showing Arrangement of Desks, Miscroscopes, Microtomes, Incubator, Centrifuge, Etc

Smears For The Detection of Gonococci.—One drop of purulent discharge from the urethra should be placed at one end of a clean slide and a thin smear made overthe surface of the slide.

In collecting a specimenf rom a female patient, care should be taken to obtain the drop of material directly from the seat of the discharge. This should be done with a sterile swab or other instrument. Two smears should always be sent to the laboratory.

Clinical Laboratory, Showing Autoclave, Hood, Operating Tables, Etc.

Urine.—for bacteriological examination should always be catheterized directly into a bottle that has been rendered sterile by boiling 15-20 minutes. No chloroform or other preservative should be added. When sending a specimen of urine to the laboratory, always mark it with the date, the name of the patient and of the physician for identification, and specify whether a chemical or bacteriological examination, or whether Ehrlich's diazo test for typhoid fever is desired. The quantity should not be less than four ounces.

Pathological·—material from either operation or autopsy should be wrapped in gauze moistened with salt solution surrounded by oiledpaper or rubber protective. When it is not possible for material to reach the laboratory within twenty-four hours it should be placed in alcohol (80 per cent) or formalin solution (10 per cent.) Small fragments of tissue and thematerial from uterine curettage should be preserved always.

Tumors.—can be sent by mailing in wide mouthed specimen jars. They should rest upon a pad of absorbent cotton, which is placed in thebottom of the jar before

the tumoris dropped in.

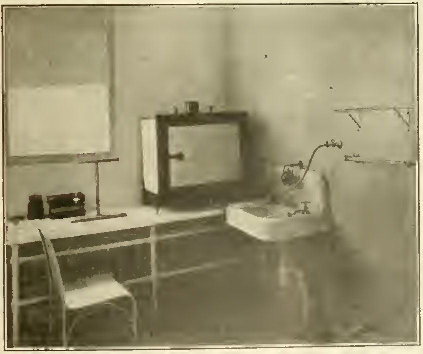
Feces.—should be sent in a clean, wide mouthed bottle. A large sterilized screw capped bottle will answer the purpose.

Wassermann's Test.—Since the advent of the discovery of 606 for the cure of Syphilis. the employment of the Wasserman test, both before and after its use, is conceded by all scientific investigators to be of the highest importance as a control to the curative effect of this remedy. The Charlotte Sanatorium Laboratory is specially equipped for carrying out this Wasserman Sero-diagnosis test for Syphilis.

(Clinical Laboratory, Showing Supplies, Working Table. Etc.)

Specimens sent to the laboratory for this test should be obtained as follows.

1st. By using an ordinary antitoxin syringe, and withdrawing the blood directly from the median basilic vein, as represented in Fig. 1 illustrates tourinquet applied, taken the blood from the vein by means of the syringe


Clinical Laboratory, With Hot Air Sterilizer, Scales, Lavatory, Etc.

2nd. By means of capillary attraction, as illustrated in Fig. 11 represents empty capsule; tourinquet applied to finger. It is best to apply constriction to middle finger, and puncture the dorsal surface of the last joint of this finger rather close to nail with a sterile, and collect blood, as illustrated in Fig. 11.

After obtaining blood if capsule is used, as is shown in Fig. 11, simply place the curved end over a flame of a Bunsen Burner, alcohol lamp, or ordinary gas jet to seal same, and mail. If syringe or other means are employed, put blood in small test tude, allow to coagulate, cork, pack and mail as any other fraigle package. Atleast two C. C. should be withdrawn for this test. The syringe tubes, etc., should be clean and perfectly dry. It is the best, if possible, for patient to go to the laboratory and have the director of that department secure for himself the specimen of blood.

Milk.—The bacteriological examination of milk, requires certain precautions in the collection of the sample. Special instructions and proper containers will be sent upon application.

Stomach Contents.—should be sentin a sterilized bottle. Alarge vaseline or quinine bottle usually answers the purpose.

Fig I

Fig II.

The following table gives the cost of many of the examinations made in this laboratory:

Smears and Stains (tubercle bacillus,) gonococci, etc.	$1.00
Blood.	
Hemoglobin and Erythrocytes	1.50
Leucocytes	1.00
Differential	1.50
Malarial parasites	1.00
Complete analysis	3.00
Urine.	
Chemical	1.00
Microscopical	1.00
Complete analysis	1.50
Pathological Sections	5 00
Feces Examination	2 00
Blood Culture	5.00
Cultures and isolation of bacteria	5.00
Stomach Contents	2.00
Widal Test	2.50
Tissue Sections	5.00
Tuberculin Test	5.00
Wassermann's Test	10.00
Milk.	
Chemical	2.50
Bacterial	5:00
Water analysis, bacterial examination	5.00
Chemical examination including alkalinity, chlorides, ammonia, nitrites and nitrates	5.00
Quantitative analysis	$10.00 to 25.00
Culture Media (per tube)	.25
Sterilized tubes and pipettes	.15
Coagulation time	2.50
Vaccines	10.00
Sterilized Tubes with swab	.50
Bacterial Cultures	1.00
Sterilized solution	5.00
Spinal Puncture and Analysis	5.00

Address all specimen to the Charlotte Sanatorium Laboratory, Charlotte, N. C.

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PATHOLOGIST and BACTERIOLOGIST, HARVEY P. BARRET, M. D.

A Danger in Elevating the Lower Third Molar.

Though cases of the nature here reported may not occur frequently in the experience of any one medical practitioner, they are attended by considerable risk of serious consequences, and I have therefore deemed it my duty to place these notes on record.

About two years ago a young woman, aged twenty-four, came to me complaining of pain round the angle of the mandible on the right side. She was found to have a badly impacted third molar. This tooth was lying with its long axis practically at right angles to and close up against the adjacent second molar, only a small portion of the posterior cups being visible. The tissues round about were slightly inflamed. Externally there was slight, but nevertheless distinct, swelling. Most fortunately, in the light of subsequent events, there was no trismus. Immediate removal of the offending tooth was decided upon. The patient was placed under gas. Not much difficulty was experienced in displacing the tooth from its bony socket with the straight elevator, but the gum behind the tooth not only failed to stretch to allow the tooth to be completely removed, but it was very loosely attached to the bone; consequently the tooth became lodged on the bone underneath the gum. Just at this critical moment, while I was disengaging the elevator to make an incision through this piece of gum, the patient commenced to struggle as she was beginning to recover from the anaesthetic, and my elevator accidentally gave the tooth an inward push, causing it, to my great surprise, to disappear. Knowing that the tooth was too much entangled in the gum for it to have become suddenly free and so swallowed, I realized at once that it must be somewhere in the tissues of the neck. I found it about one inch below the angle of the jaw. It could be distinctly and easily felt beneath the skin, and, indeed, picked up with it. I immediately asked the anaesthetist to reapply the face-piece, and while the patient was again being anaesthetized I had an opportunity to think over my next course of procedure. It was obvious I had three courses open to me: (1) To attempt to bring the tooth back the way it had gone; (2) to make an incision over it through the skin and so remove it by that route; or (3) to leave it where it was for the time being. Seeing that the tooth had passed along the inner side of the bone, and that as the deep cervical fascia is attached along its lower border it must be lying deep to this, and that therefore the danger of setting up Ludwig's angina must be great if I left the tooth where it lay, I

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PROPHYLAXIS—The very nature of artificial foods and cow's milk predisposes to their rapid decomposition. A few drops of Glyco-Thymoline added to each feeding corrects acidity and prevents disorders of stomach and intestines.

TREATMENT—As an adjunct to your treatment of summer complaints, Glyco-Thymoline used internally and by enema corrects hyper-acid conditions, stops excessive fermentation and prevents auto intoxication. It is soothing—alkaline—nontoxic.

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FORMULA:

Benzo-Salicyl. Sod. 33-33: Eucalyptol .33; Thymol. 17: Salicylate Methyl. from Betula Lenta .16: Menthol .08 Pini Pmuilionis-16: Glycerine and solvents q. s. 480,

decided that I must at all costs remove it. I determined to attempt the first course, and failing this to proceed at once with the second. Upon the removal of the face-piece I made an incision about an inch long through the piece of gum which had caused the trouble, with a pair of blunt-pointed scissors. I then passed the first and middle fingers of my left hand into the mouth and placed my right hand over the tooth, on the outside. By pressing fairly forcibly down with my left hand I managed after a little trouble to get the fingers of both hands below the tooth. It was then found to be easy to work the tooth upwards along the path it had traveled until it lay on the inner plate of the angle of the bone. Then, by pressing it against the bone, I managed to work it through my incision into the mouth. These manipulations had to be carried out quickly, because during them my left hand was pressing the tongue forcibly backwards, causing the patient to become cyanosed. Beyond prescribing a mouthwash, no special after treatment was adopted, and the wound healed well.

Looking back, it is clear that the incision which I subsequently had to make should have been made at first. In this case it could easily have been done because there was no trismus, but where this condition is present in a marked degree it might be extremely difficult.—Steadman, British Medical Journal.

Stenosis of Throat Following Salvarsan Treatment.

Dr. W. G. Spencer reports a case of Congenital Specific Stenosis of the Fauces and Pharynx in a young woman who showed persistent nodes and a gummatous scar on the scalp. In June she was admitted under Mr. Arthur Evans for severe ulceration of the fauces and pharynx. Tracheotomy was done and salvarsan administered, after which the ulceration rapidly healed, resulting in stenosis. Mr. Evans then performed a plastic operation upon the soft palate and fauces; the tracheotomy tube was then left out, and the patient was discharged on August 19, breathing and swallowing well. On October 15 she was readmitted under Mr. Spencer with dyspnœa, hardly able to swallow fluids. After reintroducing the tracheotomy tube it was found that the naso-pharynx would allow of the passage of only a very small catheter, whilst a No. 10 passed with difficulty through the fauces and pharynx. On gently dilating to admit a finger the fauces and pharynx, down to the larynx, were found to be changed into a very dense ring in which the vessels of the neck had become involved. Therefore a No. 10 œsophageal tube was passed through the left nostril down the pharynx, through which the patient was at first fed, but soon she swallowed beside it. Later, a full-sized œsophageal cannula was passed, beside which the patient could now swallow ordinary hospital diet, and had rapidly put on flesh. She could herself take out the tube when she went out of doors, and put it back before a meal. For the present, therefore, the necessity for gastrostomy had been avoided. The tracheotomy tube would be required permanently. The very dense and extensive fibrosis which had followed the rapid healing of the ulceration after salvarsan was a disappointment.—The London Lancet.

Pituitrin in Difficult Parturition.

Much attention is being given by the medical press of Germany and other European countries to the importance of pituitrin as an oxytocic. The drug has been somewhat extensively used for the past two or three years, both here and abroad, chiefly, perhaps, as a hemostatic and heart stimulant. Now it is known to be of great value in uterine inertia, obstetricians in many of the German hospitals and elsewhere who have thoroughly tested it clinically, pronouncing it a truly remarkable oxytocic.

For the benefit of practitioners who may not be familiar with its origin and nature, it may be explained that pituitrin is an extract of the posterior or infundibular portion of the pituitary gland. Although the physiology of this gland is as yet largely speculative, there seems to be no doubt that it contains a substance or substances that exert a considerable influence over the metabolism and on the cardio-vascular system.

As bearing upon the value of pituitrin in parturition, this expression from Dr. Emil Vogt, of the Royal Gynecological Clinic at Dresden, is significant:

"The oxytocic action of pituitrin at this clinic was observed in over one hundred cases. After the rupture of the fetal membranes, in the second stage of labor, the physiologic effect of pituitrin is the most pronounced; the contractions of the uterus follow each other much more rapidly and energetically, and the intervals between pains are decreased. Individually the pains are not more severe, so far as suffering is concerned, even in the case of sensitive women, than they would be in a normal delivery. In half of the cases the pituitrin was administered in the second stage of labor. It failed only once; in all other instances its action was very pronounced. And although we encounter a great many cases of narrow pelvis in Dresden, from 40

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to 50 per cent., it was not necessary to have recourse to forceps delivery in a single instance in which pituitrin was employed. . . According to our experience, pituitrin is the ideal oxytocic."

Pituitrin is manufactured by Parke, Davis & Co. It is supplied in one-ounce bottles and in glaseptic ampoules (for convenient hypodermic injection), each ampoule containing one cubic centimeter, or 16 minims, the usual dose.

Parke, Davis & Co. have just issued a pamphlet on pituitrin as an oxytocic, in which is reprinted not only the extract from Dr. Vogt which appears in this article, but also a number of others from prominent German specialists and practitioners in which pituitrin is highly extolled as a corrective of uterine inertia. Physicians will do well to write the company, addressing them at the home office in Detroit, for a copy of the pamphlet.

The Prevention of Dysmenorrhea.

How can we prevent dysmenorrhea? It can be done by keeping the patient under morphine, but this is a barbarous solution of an important problem. It in fact does not solve it. Morphine is inadmissable and improper in these cases. It produces derangement of the secretions and tends to establish a drug habit that will make life a burden. I have long employed a remedy that not only relieves the pain, but produces no habit and is not dangerous. I refer to Dioviburnia. It is a most valuable uterine tonic, antispasmodic and anodyne of exceptional worth. I rely upon this remedy to prevent dysmenorrhea, which as Professor Davenport truly says is seen in almost all, if not in all, women. I have my patients who suffer with dysmenorrhea to take Dioviburnia, beginning two days before menstruation is due and persist in it until the period has passed. I give it in doses of one to two teaspoonfuls every three hours throughout this time. When this direction is followed I have found that my patients go through the period without pain. The adoption of this treatment I may say also, has brought me many grateful compliments.

Where the patient is very nervous, having the tendency to hysteria, neuroees or uterine congestion, I administer Neurosine one part, in combination with two parts of Dioviburnia, which always give relief.—L. G. Boyd, M. D.

Syphilitic Cachexia.

In the cachexia of syphilis, particularly during the late months of the disease, Cord. Ext. Ol. Morrhuae Comp. (Hagee) has proven of much value, and is employed for this purpose in a routine manner by many physicians. Its therapeutic power as a reconstructive in syphilitic cachexia rests upon its well known property of improving bodily nutrition. Cord. Ext. Ol. Morrhuae Comp. (Hagee) is a blood-maker of high order, a feature that makes it of particular value in syphilitic debility. Its employment will be of much aid to the usually resorted to therapy of syphilis and gratifying results will be noted from its administration.

Strongyloides Infection.

Gage, of New Orleans, in a paper on "Infection of Strongyloides Intestinalis," writes that opinions differ as to the value of treatment.

Eustis reports a cure and attributes his success in part to the soluble diet given. On the other hand, Cline treated a patient for several months and, while the number of larvae diminished, they did not disappear entirely. His patient received the following treatment: large doses of thymol preceded by a 24-hour fast, one dose per week for six weeks; bismuth-beta-naphthol daily for six weeks; except on the days thymol was administered; male-fern for two days in succession each week for six weeks; large doses of calomel and santonin for three days, followed by castor oil for three weeks. In addition he took at different times phenyl salicylate (salol) and castor oil equal parts, 60 cg , three times a day; mineral acids, iron and strychnine. Regulation of diet accompanied this treatment.

The ipecac treatment, as used in amebic dysentery, was tried in one case by Simon, of New Orleans, but was not effective. In none of the author's cases was treatment administered. Since the infection is so common it is worth while trying various drugs in the hope that an effective one may be found.

Reinfection easily accounts for the failure to get rid of the parasites. Larvae which had penetrated the intestinal walls would not be affected by an anthelmintic, and on again reaching the intestines would develop into adults, so in a short time larvae would appear in the stools even though all the adults were killed at the time the anthelmintic was administered. The treatment is comparable to that for malaria; it should be repeated at intervals for a long time in order to kill those parasites which were beyond the reach of any single course of treatment.—Archives of Int. Med.

Treatment of Diabetic Coma.

Blum (Progres Medical) says that an ef-

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fective treatment of diabetic coma must realize three essential conditions—(1) neutralize the acids and promote their elimination, (2) help to the remineralization of the system and to the establishment of the proper balance of the mineral constituents of the blood, (3) prevent the vaso-motor weakness which is common in all forms of coma. The food must contain neither albumin nor fat. One or two pints of milk may be taken as well as four or five ounces of glucose per diem; champagne or brandy freely; sodium bicarbonate, one or two drachms every two hours until the urine becomes alkaline; vaso-motor and cardiac stimulants (Ringer's solution with a little adrenalin).—Medical Press.

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State Board Examination Questions of Virginia.

PHYSIOLOGY.

1. What is the difference between an excretion and a secretion?

I. Give location and function of following named glands, mentioning which are secreting and which are excreting glands: lachrymal, sebaceous, mammary, and sudorific glands.

3. Give functions of red and white blood corpuscles. What is their relative proportion in human blood?

4, Explain the glycogenic function of the liver.

5. Patient suffering from compression of brain, with the right arm and leg paralyzed: In what portion of brain would you expect to find the causative lesion?

6. Explain the heat regulation of the body.

7. Describe the structure of the spinal cord.

8. Give the nervous and muscular mechanisms of the two forms of vomiting.

9. Mention four circumstances or conditions that influence the excretion of urine. Give reason for each.

10. Name the different structures of the eye that a ray of light passes through in order to make a visual impression on the brain.

EMBRYOLOGY.

1. What is a Graafian follicle?

2. Describe the circulation of the blood in a child before birth.

SURGERY.

1. Describe operation of tracheotomy and of intubation of larynx. Give indications of each.

2. Give diagnosis and treatment of fracture of anatomical neck of humerus.

3. Describe in detail operation for radical cure of femoral hernia. What vessels would likely be injured during the operation?

4. Give etiology, diagnosis and treatment of pyonephrosis.

5. Give symptoms and treatment of acute obstruction of bowels.

6. Give differential diagnosis between loose bodies in knee joint and displaced semilunar cartilages.

7. Give treatment for suppuration in palm of hand. What is the chief danger in operation?

8. Give diagnosis and treatment of popliteal aneurism.

9. What is Pott's fracture?

10. Give early symptoms and treatment of hypertrophy of the prostate gland.

GYNECOLOGY.

11. Give etiology and treatment of retroflexion and retroversion.

12. Give etiology and treatment of acute and chronic salpingitis.

OBSTETRICS AND PEDIATRICS.

1. Mention the changes that occur during pregnancy in (a) circulatory system, (b) digestive system, (c) nervous system.

1. Give the signs and symptoms of pregnancy at the sixth month.

3. Diagnosis and prognosis of vesicular mole.

4. Mention the important diameters of the pelvis to be ascertained by internal pelvimetry, and give the methods for determining them.

5. Mechanism of labor in face presentations.

6. Diagnosis of puerperal (a) sapremia, (b) pyemia.

7. Differentiate between acute appendicitis, colic, and acute indigestion.

8. Etiology and early signs and symptoms of rickets.

9. Outline the feeding of a child during the second year.

10. Mention the variety of causes of vomiting in infants and children.

ANATOMY.

1. Give origin and distribution of internal maxillary artery.

2. Describe the eustachian tube.

3. Name the muscles of the forearm.

4. Describe the saphenous opening.

5. What is a synarthrodial joint and give example?

6. Describe the scapula.

HISTOLOGY.

1. Give histological structure of liver.

2. Describe the malpighian bodies.

3. Give histological structure of blood vessels.

4. Describe the pores.

CHEMISTRY.

1. Give preparation and properties of CO and CO_2. State medical importance of each.

2. Give the equations indicating change of grape sugar into alcohol, and alcohol into acetic acid.

3. Give preparation, properties and uses of formalin.

4. Give preparation of H_2SO_4.

5. Give preparation and uses of H_3PO_4.

6. Give preparation of CaO and $Ca(OH)_2$.

7. Name three bleaching agents, and tell how each acts.

8. Discuss arsenic.

"the basis value of a remedy is the result which it produces.

Laboratory demonstrations may prove the purity or the component parts of a product but by therapeutic application and clinical observation, must its true value as a remedy be determined.

Upon the basis of clinical manifestation of dependable uniformity, the value of antiphlogistine has been established and most generously acknowledged by its extensive employment.

In inflammatory and congestive conditions, antiphlogistine has proven of particular service and as a seasonable suggestion, its application thick and hot, well protected by suitable covering, to sprains, strained or stiffened tendons so prevalent during vacation time, will afford the patient relief from pain and an early use of the part."

9. Preparation, properties and uses of H_2O_2.

10. How is nitroglycerine made, and give properties?

11. Give chemical composition of cow's milk.

12. How is $Hg(CN)_2$ made, and give properties.

PRACTICE OF MEDICINE.

1. Give clinical picture of gastric ulcer.

2. Name causes and give treatment of acute catarrhal laryngitis.

3. Give etiology and treatment of tetanus.

4. Give diagnosis of acute appendicitis.

5. Give diagnosis of chronic interstitial nephritis.

6. Give physical signs in mitral stenosis.

7. Define (a) chorea, (b) herpes zoster, (c) acute myelitis, (d) auditory aphasia, (e) oedema.

8. What conditions, in regard to dosage, would be guided by in the intial dose of diphtheria antitoxin and in its repetition?

9. Name the more common complications of typhoid fever.

10. What symptoms, in a patient attending to business, with no history of previous illness, would lead you to suspect tuberculosis?

PATHOLOGY AND BACTERIOLOGY.

1. Typhoid Fever: (a) In which of the lymphatic structures do the specific lesions chiefly occur? (b) Describe the pathological findings in the intestines; (c) Does the blood show leucocytosis?

2. Describe the pathological lesions which take place in a case of acute phosphorus poisoning. What organ suffers most severely?

3. Aneurism: (a) Name and describe three varieties; (b) which is the most important? (c) state what you know of the etiology.

4. Name and differentiate the three varieties of leucaemia.

5. Discuss inflammation, stating what pathological processes are found. Differentiate between active and passive hyperaemia.

6. Describe the pathological changes one would expect to find in the appendix and surrounding structures in a case of catarrhal and in one of gangrenous appendicitis, respectively. What information would a blood count give as to the probable condition of the appendix?

7. Describe three classes, giving an example of each, into which bacteria may be divided with reference to their need for oxygen.

8. Describe the growth forms of bacteria, and give an example of each.

9. What do you understand by terms: (a) chemotaxis? (b) opsonins? (c) agglutinins? (d) anaphylaxis? (e) phagocytosis?

10. Give a description of discontinuous sterilization, stating for what purpose it is employed. Distinguish clearly between antiseptics and disinfectants.

MEDICAL JURISPRUDENCE.

1. What is adipocere?

2. What drugs or diseases producing death will cause the blood to remain fluid?

3. Name the diseases of the heart that may be the cause of sudden death due to natural causes.

4. How may the age be determined from the upper epiphysis of the humerus?

5. Give evidence of live birth in infanticide.

HYGIENE AND PREVENTIVE MEDICINE.

1. What are disinfectants? How classified? Where practical to use, what is the safest?

2. Given a house infected with diphtheria, scarlet fever or small-pox, give method of disinfection. What agents are best to use; how used, and what are the duties of the disinfector?

3. What is the proper amount of fresh air that should be supplied to each scholar in a school room?

4. What is vaccination against small-pox? How should it be performed, and how often should it be repeated?

5. What are bacterins? What is the most important of this group so far known, and how should typhoid bacterin be used?

THERAPEUTICS.

1. Give a good rule for computation of doses for children, and state what classes of drugs are exceptions to this rule.

2. Give directions for preparing, and indications for using, normal saline solution, and mustard bath.

3. Write a prescription for migraine containing not less than three drugs and guard against heart depression.

4. Name and average dose of one drug each most efficient in rheumatism, syphilis, gout, hookworm.

5. Give dosage, mode of administering, and uses of urotropin.

TOXICOLOGY.

1. Give directions for emptying the stomach, and state upon what organs the specific effects of the following poisons are most shown: opium, prussic acid, strychnia.

2. Name three conditions that modify the action of a poison, and give treatment of acute alcoholic poisoning.

3. Give chemical and physiological anti-

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Black Tea: 1 cupful thereof containing 5 fluid ounces contains 1.54 grains of caffeine.
Green Tea: 1 glassful of 8 fluid ounces, contains 2.02 grains of caffeine.
Coffee With Hot Milk: 1 cupful of 5 fluid ounces, three-fifths coffee, two-fifths milk, contains 2.61 grains of caffeine.
Black Coffee: 1 cup after-dinner coffee of two fluid ounces contains 1.74 grain of caffeine.
Coca-Cola Syrup: 1 fluid ounce contains 1.21 grains of caffeine.

The above is a verbatim extract from Dr. Mallet's testimony in the trial at Chattanooga—U. S. Government *vs.* Coca-Cola; which, as you know, we won.

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MATERIA MEDICA.

1. What is meant by the term "Materia Medica," and what does it embrace?
2. What do you understand is meant by "Official" or "Officinal" preparations, and how are such preparations classified?
3. What is the composition of chlorinated lime; how and for what purpose is it largely used?
4. What are hemostatics? Name several, describing their mode of action.
5. What is paraldehyde, and what is its principal use?
6. Name the three most prominent drugs that are classed as "simple bitters," with the preparations of each, and state what is the preferable time for administering same.
7. What is cocaine; from what derived; its dose and effect—(a) locally, (b) internally?

MATERIA MEDICA—THERAPEUTICS AND TOXICOLOGY.

1. Give general characteristics of the calcarea group.
2. Give urinary symptoms of cantharis.
3. Give catarrhal symptoms of pulsatilla.
4. Name one antipsoric and discuss briefly.
5. Discuss arsenicum, baptisia and rhus tox in typhoid.
6. Differentiate ipecac and ant. tart. in respiratory affections.
7. Name two remedies in rheumatism, and differentiate.
8. Compare gastro-intestinal symptoms of lyco- and carbo-veg.
9. Give ameliorations and aggravations of bry- and kali-carb.
10. Discuss briefly sphere of action of aconite.
11. Name four forms of mercurius and give brief description of sphere of action of each.
12. Give gastric symptoms of arsenicum and general symptoms indicating this drug.
13. Mention chief indications for bryonia in pneumonia.
14. State antidote to most alkaloids, and explain its action.
15. What are the chemical antidotes to carbolic acid?

Link the Past with the Present.

J. Marion Sims many years ago said, "For severe Dysmenorrhea I have found Hayden,s Viburnum Compound of great service."

What was true as to the therapeutic value of Hayden's Viburnum Compound in the time of Sims is just as much of a fact today. As a remedy in the treatment of Dysmenorrhea, Amenorrhea and other functional irregularities of the uterus and its appendages, H. V. C. is dependable in action, and as it is of known composition and contains no narcotics it is safe to prescribe.

As a uterine tonic and antispasmodic it is of particular service, and to any physician who desires to clinically demonstrate its therapeutic action samples and literature will be forwarded upon request to New York Pharmaceutical Co., Bedford Springs, Bedford, Mass.

Effects of Salvarsan on the Blood Count.

These effects were carefully studied by the authors in 8 cases. Counts were made before salvarsan injection, two or three days after the injection, and again on the thirteenth to the fifteenth day. The authors found that at the second count the red cells had diminished in 5 of the 8 cases, but that at the third count an increase had taken place in 7 instances. This increase in 1 case (after two injections of salvarsan) amounted to 2,450,000; it averaged 500,000 to 1,000,000. The white cells, contrary to expectations, showed a diminution in 1 case amounting to 3700, at the second count. In 2 cases only did the white cells return to normal by the fifteenth day; in these there was a slight increase above normal—200 and 1000 respectively. The differential leucocyte count was but little altered; the mononuclear cells seemed to take a greater part in the leukopenia than the polymorphonuclears. The authors conclude that salvarsan would seem to exert a beneficial effect upon the anemia of syphilitics, in addition to its spirillocidal action. In a case of breast cancer (included in the 8 under investigation), the red cell count was lowered by the remedy. The effect on the white cells was not such as would lead to expect the production of a beneficial leucocytosis by it in infective disorders, medical or surgical. It should be tried, however, the authors think, in certain severe cases of septicemia, especially where there is marked anemia.—L. Thevenot and E. Brissaud, Progres medical.

CHEMICAL FOOD is a mixture of Phosphoric Acid and Phosphates, the value of which physicians seem to have lost sight of to some extent in the past few years. The Robinson-Pettet Co., incorporated, to whose advertisement (on page xiv) we refer our readers, have placed upon the market a much improved form of this compound, "ROBINSON'S PHOSPHORIC ELIXIR." It's superiority consists in it's uniform composition and high degree of palatability.

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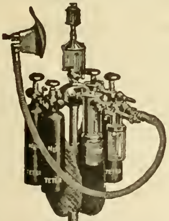

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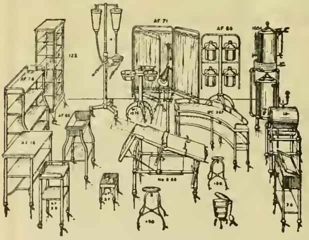

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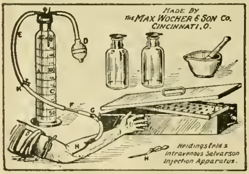

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SPECIAL WESTERN NUMBERS

In furthering the plan of producing special issues of the **American Journal of Surgery** composed of contributions by surgeons residing within a certain geographical area, yet of international reputation there will be issued in the early part of 1912 a **Special Western Number** of this magazine.

Subjects and those to contribute:

The Operation of Gastroenterostomy, by William J. Mayo, Rochester, Minn.

The Surgery of Tendons, by John B. Murphy, Chicago, Ill.

Operative Treatment for Graves Disease, by George W. Crile, Cleveland, Ohio.

Colonic Intoxication, by J. E. Binney, Kansas City, Mo.

Practical Points in the Surgical Treatment of Exopthalmic Goitre, by A. J. Ochsner, Chicago, Ill.

Treatment of Foreign Bodies in the Esophagus, by E. Fletcher Ingals, Chicago, Ill.

Brain Surgery Technique, by J. Rilus Eastman, Indianapolis, Ind.

Treatment of Abscesses and of the Necrotic Foci Resulting from the Use of Salvarsan, by A. Ravolgi, Cincinnati, Ohio.

Treatment of Prostatic Obstruction, by E. O. Smith, Cincinnati, Ohio.

Subject not Announced, by H. Tuholske, St. Louis, Mo.

Artificial Tendons and Ligaments in the Surgical Treatmeut of Paralysis, by Nathaniel Allison, St. Louis, Mo.

Uterine Cancer, by John C. Murphy, St. Louis, Mo.

Arthritis Derformans, Leonard W. Ely, Denver, Colo.

Acute Angulation and Flexure of the Sigmoid as a Causative Factor in Epilepsy with special Reference to Treatment, by W. H. Axtell, Bellingham, Wash.

The character of contributions prepared by these well known surgeons are of such a nature as to make this number particularly interesting.

THE AMERICAN JOURNAL OF SURGERY'
NEW YORK CITY.

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Dr. A. Francis Foye, 1342 Q Street. Washington, D. C., writes:

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Blood and Skin Disorders--Uric Acid Diathesis.

Dr. J. Allison Hodges, President of the University College of Medicine, Richmond, Va., under date of February 6, 1903, writes:

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Dr. Wyatt S. Beazley, 2713 East Broad Street, Richmond. Va., under date of September 11. 1902, writes:

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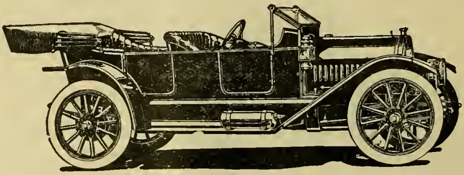

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Treas. S. C. Stanton, M. D., Chicago. Ill.
Next Meeting Detroit, Mich., Sept, 13th-14-15, 1910.

SOUTHERN SURGICAL and GYNECOLOGICAL ASSOCIATION.

Annual Meeting at Washington, D. C., Dec, 19-21, 1911.
W. D. Haggard. M. D., Sec., Nasheville, Tenn.
Rudolph Matas, Prest. New Orleans, La.

SOUTHERN MEDICAL ASSOCIATION.

Annual meeting at Hattiesburg, Miss. Nov .14-15-16, 1911.
Oscar Dowling, M. D., Sec. Shreveport, La.
Isadore Dyer, M. D., Pres. New Orleans, La.

TRI-STATE MEDICAL ASSOCIATION OF THE CAROLINAS AND VIRGINIA.

Annual Meeting at Norfolk, Va., Feb. 23-24, 1912.
Ralfe E. Hughes, M. D., Sec., Laurens, S. C.
A. E. Baker, M, D., Pres. Charleston. S. C.

MEDICAL ASSOCIATION OF THE STATE OF ALABAMA.

Annual meeting at Birmingham, Ala., April,19 1912.J. N. Baker, M. D., Sec.,602 S. Perry St., Montgomery, Ala.
L. C. Morris , M. D., Pres. Birmingham, Ala.

MEDICAL ASSOCIATION OF THE SOUTHWEST.

Annual Meeting at Oklahoma City, Okla. October, 1911.
F. H. Clark, M. D., Sec., El Reno, Texas.
M. L. Perry, M. D. Prest., Parsons, Kans.

FLORIDA MEDICAL ASSOCIATION.

Annual Meeting at Tampa, Fla. May, 8-9-10, 1912.
J. D. Fernandez, M.D., Sec., Jacksonville, Fla.
A. H. Freeman, M. D., Pres. Starke, Fla.

MEDICAL ASSOCIATION OF GEORGIA.

Annual Meeting at Augusta Ga., April, 17-18-19 1912.
W. C. Lyle, M. D., Sec. Augusta, Ga.
W. L. Felts, M. D., Pres., Corrollton, Ga.

KENTUCKY STATE MEDICAL ASSOCIATION

Annual Meeting at Louisville, Ky. 1912. (Date not decided)
Arthur T. McCormack, M. D., Sec., Bowling Green, Ky.
Jas. G. Carpenter, M. D. Prest., Stanford, Ky.

LOUISIANA STATE MEDICAL SOCIETY.

Annual Meeting at New Orleans, La. April, 23-25, 1912.
Joseph D. Martin, M. D., Sec., 141 Elk Place, New Orleans, La.
R. O. Simmons, M. D. Pres. Alexandria, La.

MISSISSIPPI STATE MEDICAL ASSOCIATION.

Annual Meeting at Jackson, Miss, April 11, 1912.
E. F. Howard, M. D., Sec., Vicksburg, Miss.
D. J. Williams, M. D., Pres., Ellisville, Miss.

MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA.

Next Annual Meeting at Hendersonville, N. C. June, 18, 1912.
A. A. Kent, M. D., Pres. Lenoir, N. C,
D. A. Stanton, M. D., Sec., High Point, N. C.

NEW MEXICO MEDICAL SOCIETY.

Annual Meeting at Roswell, N. M. (Date not yet decided). 1921.
Dr. R. E. McBride, M. D. Las Cruces N.M. Secretary.
R. L. Bradley, M. D. Pres, Roswell, N. M

SOUTH CAROLINA MEDICAL ASSOCIATION.

Annual meeting at Columbia, S. C., April 20, 1912.
Edward A. Hines, M. D., Sec., Seneca, S. C.
J. W. Jervey, M. D., Pres. Greenville, S. C.

TENNESSEE STATE MEDICAL ASSOCIATION.

Annual Meeting at Chattanooga, Tenn. April, 9, 1912.
Perry Bromberg, M. D., Sec., Nashville, Tenn.
C. J. Broyles, M. D., Pres. Johnson, City, Tenn.

MEDICAL SOCIETY OF VIRGINIA

Annual Meeting at Norfolk, Ky. Oct. 22-25, 1912.
P. A. Irving, M. D., Sec., Farmville, Va.
Hugh M. Taylor, M. D., Pres. Richmond, Va.

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